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# The Protection of Soybeans, January 1980-November 1984

## Citations from Agricola Concerning Diseases and Other Environmental Considerations



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# **The Protection of Soybeans, January 1980-November 1984**

## **Citations from Agricola Concerning Diseases and Other Environmental Considerations**

Compiled by  
Charles N. Bebee  
National Agricultural Library

Bibliographies and Literature  
of Agriculture Number 38

United States Department of Agriculture  
National Agricultural Library  
Beltsville, Maryland 20705

and

United States Environmental Protection Agency  
Office of Pesticide Programs  
Washington, D.C. 20460

August 1985



## FOREWORD

This is the second volume in a series of commodity-oriented environmental bibliographies resulting from a memorandum of understanding between the United States Department of Agriculture, National Agricultural Library (USDA-NAL), and the Environmental Protection Agency, Office of Pesticide Programs (EPA-OPP).

This close working relationship between the two agencies will produce a series of bibliographies which will be useful to EPA in the regulation of pesticides, as well as to any researcher in the field of plant or commodity protection. The broad scope of information contained in this series will benefit USDA, EPA, and the agricultural community as a whole.

The sources referenced in these bibliographies include the majority of the latest available information from United States publications involving commodity protection throughout the growing and processing stages for each agricultural commodity.

We welcome the opportunity to join this cooperative effort between USDA and EPA in support of the national agricultural community.



JOSEPH H. HOWARD, Director  
National Agricultural Library



STEVEN SCHATZOW, Director  
Office of Pesticide Programs





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The following materials are **not** available for loan: serials (except for USDA serials), rare, reference and reserve books, microforms, and proceedings of conferences or symposiums. Photocopy or microform of the non-circulating publications will be supplied automatically as described below if the requesting organization indicates that this is acceptable on the loan request form.

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## INTRODUCTION

The citations in this bibliography are selected from works by U.S. authors on all aspects of the protection of soybeans from diseases, insects, nematodes, chemicals, or other environmental conditions which affect the yield and quality of this commodity. All citations are derived from AGRICOLA (AGRICultural OnLine Access), the master bibliographic database compiled by the National Agricultural Library for its 1.8-million-volume collection.

This is the second bibliography in a series jointly sponsored by the National Agricultural Library, United States Department of Agriculture (USDA-NAL), and the Office of Pesticides Programs, Environmental Protection Agency (EPA-OPP). Additional volumes planned in the immediate future will concern protection of cotton, wheat, grain sorghum, rice, peanuts, and tobacco.

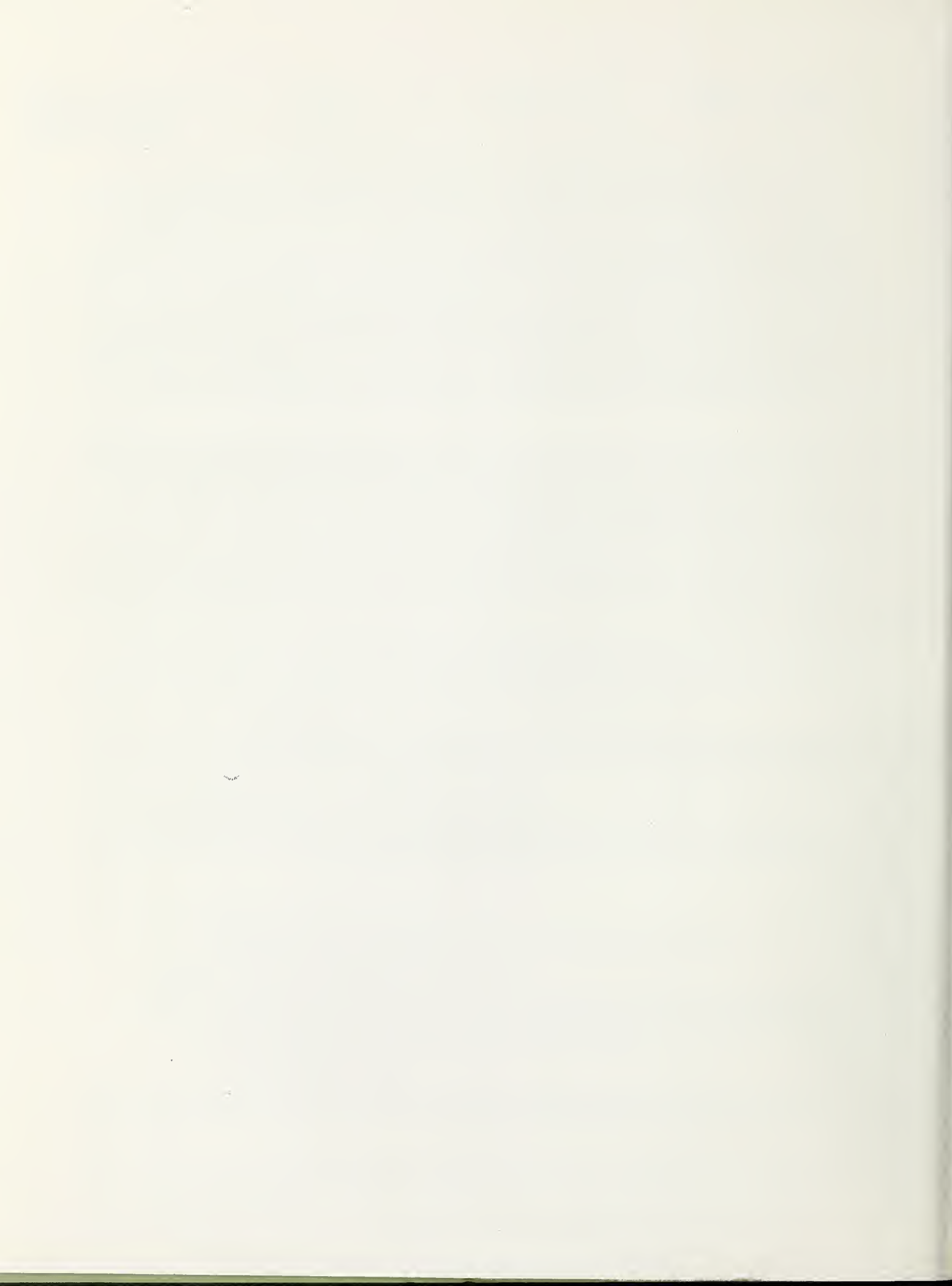
Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and in the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is also included in the publication.

The Office of Pesticide Programs, EPA, has furnished technical assistance to the compiler through members of a commodity-oriented environmental data team which included:

Charles D. Reese  
H. Irving Brigham  
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Richard Petrie

Any comments or questions may be forwarded to the compiler:

Charles N. Bebee  
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Beltsville, MD 20705  
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Bryant, G.R. Hill, J.H.; Bailey, T.B.;  
Tachibana, H.; Durand, D.P.; Benner, H.I. St. Paul, American Phytopathological Society. Plant disease. Aug 1982. v. 66 (8). p. 693-695. 15 ref. (NAL Call No.: 1.9 P69P).

# METEOROLOGY AND CLIMATOLOGY

0002

**Analysis of yield decline in soybeans planted at nonoptimal planting dates, Baton Rouge, 1981 Planting Date Study.**

Board, J.E. Baton Rouge, La., The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 107-111. (NAL Call No.: 100 L936).

0003

**Comparison of meteorological and standardized timings of fungicide applications for soybean disease control (Glycine max, system based on rainfall frequency, Alabama).**

Backman, P.A. Crawford, M.A.; Hammond, J.M. St. Paul, American Phytopathological Society. Plant disease. Jan 1984. v. 68 (1). p. 44-46. Includes references. (NAL Call No.: 1.9 P69P).

0004

**Drought and insects: bad news for beans (Soybeans).**

McPherson, R.M. Allen, W.A. San Francisco, California Farmer Publishing Co. Agrichemical age. Apr 1981. v. 25 (4). p. 16, 18, 42. ill. (NAL Call No.: 381 AG85).

0005

**Effect of field weathering on the viability and vigor of soybean seed.**

TeKrony, D.M. Egli, D.B.; Phillips, A.D. Madison, Wis., American Society of Agronomy. Agronomy journal. Sept/Oct 1980. v. 72 (5). p. 749-753. ill. Bibliography p. 752-753. (NAL Call No.: 4 AM34P).

0006

**The effects of temperature on longevity and vitality of soybean seeds (Storage).**

Bailey, Z.E. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 109-111. ill. (NAL Call No.: aSB205.S7S6).

0007

**Environmental sensitivity of acetylene reduction activity in prediction of N (nitrogen) fixation in soybeans (relationship between effects of water stress and temperature).**

Raper, C.D. Jr. CR. Patterson, R.P. Madison, Wis., American Society of Agronomy. Agronomy journal. Sept/Oct 1980. v. 72 (5). p. 717-719. ill. 13 ref. (NAL Call No.: 4 AM34P).

0008

**Influence of water stress on the diurnal exchange of mass and energy between the atmosphere and a soybean canopy (Glycine max, Nebraska).**

Baldocchi, D.D. AGJDA. Verma, S.B.; Rosenberg, N.J.; Blad, B.L.; Garay, A. Madison: American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 543-548. ill. Includes references. (NAL Call No.: 4 AM34P).

0009

**Relationship between weather and soybean seed infection by *Phomopsis* sp. (Glycine max).**

TeKrony, D.M. PHYTA. Egli, D.B.; Stuckey, R.E.; Balles, J. St. Paul: American Phytopathological Society. Phytopathology. June 1983. v. 73 (6). p. 914-918. Includes references. (NAL Call No.: 464.8 P56).

# HISTORY

0010

The role of the Northern Regional Research Center in the development of quality control procedures for fats and oils (Soybeans, flax, history, U.S. Department of Agriculture, Agricultural Research Service, Illinois). List, G.R. Champaign, Ill. : The Society. Journal of the American Oil Chemists' Society. June 1984. v. 61 (6). p. 1017-1022. Includes references. (NAL Call No.: 307.8 J82).

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Use of imported natural enemies against insect pests of soybean (Biological control, prospects for future introductions, USA, includes history of importations). Jones, W.A. Jr.SCSBA. Young, S.Y.; Shepard, M.; Whitcomb, W.H. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. June 1983. Regional Research Project S-74. June 1983. (285). p. 63-77. Includes references. (NAL Call No.: 100 G29S0).

# U.S. EXTENSION SERVICES

0012

**Nematode advirosoy programs--status and prospects (Wheat, soybeans, economic crops, United States).**

Barker, K.R. Imbriani, J.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1984. v. 68 (8). p. 735-741. ill. Includes 18 references. (NAL Call No.: 1.9 P69P).

0013

**Selected factors in the adoption of a recommended farm practice / by Billy A. Dick.**

Dick, Billy A. 1968. Extension Repository Collection ~Typescript ~"A project in agricultural extension education submitted to the College of Agriculture, University of Georgia, in partial fulfillment of the requirements for course credit in Agricultural Extension 921.". ix, 35 leaves ; 29 cm. Bibliography: leaves (30)-31. (NAL Call No.: S544.3.G4D5).

# LEGISLATION

0014

**The farm pesticide industry.**

Eichers, T.R. Washington, D.C., The Department.  
Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AGBA).

# ECONOMICS

0015

**The contribution of herbicides and other technologies to soybean production in the Corn Belt Region, 1965 to 1979.**

Schroder, D. Headley, J.C.; Finley, R.M. Columbia, Missouri, The Department. Extract: This report attempts to identify the contributions of technology and weather to soybean yield variation for the period 1965 to 1979 in the Corn Belt Region. Technology variables included were genetic improvement, herbicides, and row-width. A pooled cross-sectional time-series data base was used to estimate regression parameters for herbicides and other variables. A marginal private benefit/cost return of \$2.3 per dollar of herbicide cost was estimated for additional land treated with herbicides. Paper - University of Missouri-Columbia, Dept. of Agricultural Economics. (1981?). (1981?). (1981-33). 25 p. 35 ref. (NAL Call No.: 917437(AGE)).

0016

**Economic analysis of alternative controls of the soybean cyst nematode in Southern Illinois.**

Reis, R.P. Noel, G.R.; Swanson, E.R. Urbana, Ill., The Department. Extract: In this report we illustrate the economic logic of analyzing various control methods for soybean cyst nematode. They are: soybean variety, crop sequence, use of a nematicide, and fertilization. Unfortunately there was no single experimental data base which had considered all of these control methods and the potential interactions among them. Consequently it was necessary to synthesize from various sources a set of soybean yield data reflecting the yield consequences of the various control measures. Illinois agricultural economics staff paper, series E, agricultural economics - Dept. of Agricultural Economics, University of Illinois. Dec 1981. Dec 1981. (81 E-203). 17 p. 12 ref. (NAL Call No.: 916937(AGE)).

0017

**Economic analysis of the impact of registration cancellation of 1,2-dibromo-3-chloropropane (DBCP).**

Schmidt, K.M. Swanson, E.R. Urbana, Ill., The Department. Extract: Three methods were used to evaluate the impact of cancellation of the registration of DBCP as a nematicide on the 1,830,000 acres of soybeans treated with DBCP in 1977. The first two methods specified use patterns for substitutes and also made specific assumptions about the relative efficacy of the nematicides. Economic impact estimates were made without ethylene dibromide (EDB) as an alternative and with EDB as an alternative. Illinois agricultural economics staff paper, series E, agricultural economics - Dept. of Agricultural Economics, University of Illinois. Apr 1981. Apr 1981. (81 E-161). 51 p. 51 ref. (NAL Call No.: 916937(AGE)).

0018

**Economic benefits of breeding host plant resistance: a simulation approach.**

Zavaleta, L.R. Kogan, M. Fargo : North Dakota State University. Extract: Economic benefits to be obtained from breeding resistance in soybean host plants are explored and measured for two modalities of antibiosis. Varieties with lower levels of mortality were found to be most useful in the presence of low insect populations. For medium populations, effective control was obtained only for varieties with high mortality levels. The effects of delays in the rate of development of the insects were comparable to some of the effects obtained with induced mortality. North Central journal of agricultural economics. Jan 1984. v. 6 (1). p. 17-27. Includes 17 references. (NAL Call No.: HD1773.A3N6).

0019

**The farm pesticide industry.**

Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

0020

**Preliminary benefit analysis of captan for seed treatment of corn, small grains and soybeans.**

Grube, A.H. Urbana, Ill. : The Department. Extract: This report is a preliminary benefit analysis of the fungicide captan used as a seed treatment on corn, soybeans, sorghum, wheat, barley, oats and rye. This analysis is intended as input to the risk/benefit decision by the Administrator of EPA as to the continued registration of captan under the Federal Insecticide, Fungicide, and Rodenticide Act. Illinois agricultural economics staff paper, series E agricultural economics - University of Illinois, Department of Agricultural Economics. Oct 1982. Oct 1982. (E-238). 201 p. Includes 325 references. (NAL Call No.: 916937(AGE)).

0021

**Preliminary benefit analysis of PCNB for seed treatment on small grains and soybeans (pentachloronitrobenzene).**

Grube, A.H. Urbana, Ill., The Department. Extract: This report is an economic impact analysis of the use of PCNB (pentachloronitrobenzene) as a seed treatment for small grains and soybeans. The information presented in this report corresponds to a specification of requirements for an economic

impact analysis that appeared in the Federal Register, Vol. 41, No. 102 (Appendix IB) on May 25, 1976. The Notice requires that the preliminary analysis identify the major and minor uses of the pesticide, estimate the quantities utilized, identify the registered alternatives and their availability, determine the change in pesticide costs associated with the use of alternatives, and evaluate the regulatory impact upon crop production and retail prices. This analysis focuses on the uses of PCNB as a seed treatment on soybeans, wheat, barley, oats and sorghum in terms of active ingredients applied per year. Illinois agricultural economics staff paper, series E, agricultural economics - Dept. of Agricultural Economics, University of Illinois. Apr 1981. Apr 1981. (81 E-160). 109 p. Bibliography p. 92-105. (NAL Call No.: 916937(AGE)).

No.: 916937(AGE)).

#### 0022

**Severity of infestation of the soybean cyst nematode (*Heterodera glycines* Ichinohe) in Louisiana (*Glycine max*, yield losses, economic impact).**

Bachiredy, V.R. Baton Rouge : The University. Research bulletin - Southern University. July 25, 1982. v. 4 (1). p. 30-42. maps. Includes references. (NAL Call No.: S539.5.R42).

#### 0023

**Soybean herbicides: recommendations, use surveys and treatment costs.**

Park, J.K. Nafziger, E.D.; Swanson, E.R. Urbana, Ill., The Department. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. July 1981. Predominantly tables. July 1981. (81 E-181). 93 p. 43 ref. (NAL Call No.: 916937(AGE)).

#### 0024

**Soybean insecticides: recommendations, use surveys and treatment costs.**

Park, J.K. Nafziger, E.D.; Swanson, E.R. Urbana, Ill., The Department. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. July 1981. July 1981. (81 E-182). 48 p. 51 ref. (NAL Call No.: 916937(AGE)).

#### 0025

**Soybean nematocides/fungicides: recommendations, use surveys and treatment costs.**

Park, J.K. Nafziger, E.D.; Swanson, E.R. Urbana, Ill., The Department. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. July 1981. July 1981. (81 E-183). 35 p. 53 ref. (NAL Call

# ECONOMICS OF AGRIC. PRODUCTION

0026

**The contribution of herbicides and other technologies to soybean production in the Corn Belt Region, 1965 to 1979.**

Schroder, D. Headley, J.C.; Finley, R.M.  
Columbia, Missouri, The Department. Extract:  
This report attempts to identify the contributions of technology and weather to soybean yield variation for the period 1965 to 1979 in the Corn Belt Region. Technology variables included were genetic improvement, herbicides, and row-width. A pooled cross-sectional time-series data base was used to estimate regression parameters for herbicides and other variables. A marginal private benefit/cost return of \$2.3 per dollar of herbicide cost was estimated for additional land treated with herbicides. Paper - University of Missouri-Columbia, Dept. of Agricultural Economics. (1981?). (1981?). (1981-33). 25 p. 35 ref. (NAL Call No.: 917437(AGE)).

0027

**Modeling soybean growth for crop management (Irrigation and pest management decisions, SOYGRO).**

Wilkerson, G.G.TAAEA. Jones, J.W.; Boote, K.J.; Ingram, K.T.; Mishoe, J.W. St. Joseph : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Jan/Feb 1983. v. 26 (1). p. 63-73. ill. Includes references. (NAL Call No.: 290.9 AM32T).

# FARM ORGANIZATION AND MANAGEMENT

0028

**Application of a simulative approach to evaluating alternative methods for the control of agricultural pests.**  
Reichelderfer, K.H. Bender, F.E. Lexington, Ky., American Agricultural Economics Association. Extract: A microanalytic simulation model of the interrelationships among Mexican bean beetle pest populations, populations of wasps that are parasites of the pest, chemical control inputs, and soybean yield is presented. Points from output response surfaces obtained through simulations of alternative biological and chemical pest control strategies are utilized in conjunction with cost data to construct benefit-cost ratios for each intraseasonal control option studied. Comparison of ratios indicates that biological of the pest is, by benefit-cost criteria and from both private and social perspectives, a competitive alternative to chemical control. American journal of agricultural economics. May 1979. v. 61 (2). p. 258-267. 19 ref. (NAL Call No.: 280.8 J822).

0029

**Cost effectiveness of postemergence glyphosate and sethoxydim to johnsongrass in soybeans and cotton (Sorghum halepense, herbicides).**  
Derting, C.W. SWSPB. Sandberg, C.L.; Whatley, T.L.; Wu, C.H. Champaign : The Society. Proceedings - Southern Weed Science Society. 1983. 1983. (36th). p. 21-25. Includes references. (NAL Call No.: 79.9 S08).

0030

**Economic benefits from the use of nonchemical means of pest management: a simulation approach.**  
Zavaleta, L.R. Kogan, M. Urbana, Ill. : The Department. Extract: The scope of this paper is to analyze the potential economic benefits that can be derived from the development and use of nonchemical methods of control. Its focus will be placed in the soybean crop and its interaction with an insect pest, the bean leaf beetle, *Cerotoma trifurcata* (Coleoptera: Chrysomelidae). Illinois agricultural economics staff paper, series E agricultural economics - University of Illinois, Department of Agricultural Economics. Sept 1982. Sept 1982. (E-233). 17 p. Includes 21 references. (NAL Call No.: 916937(AGE)).

0031

**An economic engineering study of commercial grain storage in South Carolina (Corn, wheat, soybeans, costs and returns).**  
Shedd, D.T. SCAEA. Miller, S.E. Clemson : The Station. Bulletin - South Carolina Agricultural Experiment Station. July 1983. July 1983. (649). 18 p. Includes references. (NAL Call No.: 100 S08 (1)).

0032

**An economic evaluation of weed control methods used in combination with crop rotation: a stochastic dominance approach.**  
Zacharias, T.P. Grube, A.H. Fargo : North Dakota State University. Extract: Experimental results from a 10-year herbicide use and crop rotation study provided the data for an analysis of weed control cropping systems. Stochastic dominance was used to rank the various systems. Results indicate that regardless of weed control method a rotation of two years corn and one year soybeans was the most preferred. Systems which substituted cultivation for herbicide use were least preferred. Successively altering herbicides on an annual basis as compared to applying a single major herbicide was found to increase both net returns and risk and would be preferred only by growers who were mildly risk preferring. North Central journal of agricultural economics. Jan 1984. v. 6 (1). p. 113-120. Includes 9 references. (NAL Call No.: HD1773.A3N6).

0033

**Economic feasibility of a biological control technology using a parasitic wasp, *pediobius foveolatus*, to manage Mexican bean beetle on soybeans.**  
Reichelderfer, K.H. Washington, D.C., The Service. Agricultural economic report - United States Dept. of Agriculture, Economics, Statistics, and Cooperatives Service. Aug 1979. Aug 1979. (430). 20 p. 9 ref. (NAL Call No.: A281.9 AG8A).

0034

**Economic impact of registration of ethylene dibromide (EDB) for use on soybeans.**  
Schmidt, K.M. Swanson, E.R. Urbana, Ill., The Department. Extract: Estimates of the economic impact of federal registration of EDB for use as a nematicide on soybeans were developed for two scenarios. Scenario I assumes that EDB is limited to soybean acreage presently treated with other fumigant nematicides. This limit was removed in Scenario II to allow EDB to be substituted for both fumigants and systemic nematicides. The total welfare impact in terms of changes in producers' rents plus consumers' surplus was estimated with a simulation model (AGSIM). These impacts were measured by the present value of an infinite series of future changes resulting from the registration of EDB. Estimated present value of the total welfare gains from the Section 24(c) exemptions is about 700 million dollars with approximately an additional one percent gain from a nation-wide registration. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. Apr 1981. Apr 1981. (82 E-218). 87 p. Bibliography p. 69-87. (NAL Call No.: 916937(AGE)).

## (FARM ORGANIZATION AND MANAGEMENT)

0035

### **Economic losses due to weeds in soybeans in the Northeastern United States in 1977.**

Parochetti, J.V. Beltsville, Md. Proceedings of the ... annual meeting Northeastern Weed Science Society. 1979. v. 33. p. 44-47. ill. (NAL Call No.: 79.9 N814).

0036

### **An economic threshold model for weeds in soybeans (Glycine max) (Herbicide application).**

Marra, M.C. WEESA. Carlson, G.A. Champaign : Weed Science Society of America. Weed science. Sept 1983. v. 31 (5). p. 604-609. ill. Includes references. (NAL Call No.: 79.8 W41).

0037

### **Farm efficiency and insect infestation forecasts: the case of soybeans in Illinois.**

Moffitt, L.J. Farnsworth, R.L.; Zavaleta, L.R.; Kogan, M. Washington, D.C. : The Service. Extract: A preposterior decision model and a scouting model are used to estimate the economic benefits of an area-wide soybean insect prediction system in Illinois. Results suggest forecast reliabilities of the insect prediction system must exceed 90 percent accuracy before grower profits increase and acres scouted by consultants decrease. Insecticide use, however, can increase or decrease over a range of forecast reliabilities because of the shift from insect consultants to an area-wide public supported insect prediction system. If risk averse behavior is assumed, growers will likely apply more insecticides and hence reduce forecast prediction benefits. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Oct 1982. Available from NTIS, order no. PB83-128728. Oct 1982. (AGES821013). 31 p. Includes 15 references. (NAL Call No.: 916762(AGE)).

0038

### **Impact of reduction in use of dibromochloropropane (DBCP) on 1979 soybean yields.**

Park, J. Schmidt, K.; Swanson, E.R. Urbana, Ill., The Department. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. Mar 1981. Mar 1981. (81 E-158). 25 p. (NAL Call No.: 916937(AGE)).

0039

### **Impacts of pesticide withdrawal on a typical Indiana farm: an economic analysis.**

Cashman, C.M. Martin, M.A.; McCarl, B.A. West Lafayette, The Station. Extract: This bulletin analyzes the short-run, farm-level economic impacts of possible Environmental Protection

Agency bans on the use of selected corn and soybean pesticides commonly used in Indiana and elsewhere in the Corn Belt. Station bulletin - Dept. of Agricultural Economics, Agricultural Experiment Station, Purdue University. Sept 1980. Sept 1980. (291). 119 p. 19 ref. (NAL Call No.: HD1775.I6I5).

0040

**Income and risk associated with various pest management levels, tillage systems, and crop rotations: an analysis of experimental data.** Zavaleta, L.R. Eleveld, B.; Kogan, M.; Wax, L.; Kuhlman, D.; Lim, S.M. Urbana, Ill. : The Department. Extract: Budgets for producing and protecting corn and soybean crops were generated for three cropping systems using three levels of pest management and two tillage practices. The corn-soybean rotation produced higher yields and higher net returns than either the continuous corn or soybean cropping system, and it generally had the lowest risk for any of the tillage systems at each management level. Neither conventional nor reduced tillage appeared to dominate; neither did high, medium, or low chemical input dominate. AERR - University of Illinois, Department of Agricultural Economics. Apr 1984. Apr 1984. (191). 19 p. Includes 10 references. (NAL Call No.: 281.9 IL62).

0041

### **Indiana farm-level impacts of possible Environmental Protection Agency bans on selected soybean insecticides.**

Cashman, C.M. Martin, M.A.; McCarl, B.A. Lexington, Ky., Southern Agricultural Economics Assoc. Extract: The primary purpose of our study was to determine the economic impacts of a possible ban by the Environmental Protection Agency on selected soybean insecticides used by some farmers in Indiana who face periodic soybean yield losses due to insect damage. A 600-acre Indiana corn-soybean farm was analyzed by means of a linear programming model. The economic impacts of possible bans on soybean insecticides were measured in terms of changes in per-acre yields, production costs, farm income, per-acre profits, machinery and labor use, and timeliness of field operations. Yield and related information on alternative soybean insecticides was derived from test plot data. Southern journal of agricultural economics. Dec 1980. v. 12 (2). p. 147-152. 8 ref. (NAL Call No.: HD101.S6).

0042

### **Pest management in experimental soybean cropping systems: a preliminary economic and risk analysis.**

Zavaleta, L.R. Eleveld, B.; Starr, V.B.; Kogan, M.; Wax, L.; Helm, C.; Lim, S.M.; Kuhlman, D. Urbana, Ill. : The Department. Extract: Crop production-protection budgets for soybean were generated for three levels of pest management

and two tillage practices. For the data analyzed, results indicated that high levels of pest management always resulted in a less risky alternative. Conversely, reduced tillage practices tended to increase the variability in yields and returns. Illinois agricultural economics staff paper, series E agricultural economics - University of Illinois, Department of Agricultural Economics. Apr 1983. Apr 1983. (E-253). 26 p. Includes 5 references. (NAL Call No.: 916937(AGE)).

0043

**Socio-economic factors relating to the IFA (Imported Fire Ant) and its management (Solenopsis, pests of livestock, fruits, vegetables, hay, soybeans, agricultural losses).**

Headley, J.C. Aspelin, A.; Adams, C.T.; Brooks, T.; Brown, R.E. (Washington, D.C.?) : U.S. Dept. of Agriculture, APHIS, 1982. Proceedings of the Symposium on the Imported Fire Ant, June 7-10, 1982, Atlanta American Hotel, Atlanta, Georgia / editor S.L. Battenfield. p. 41-50.5. Includes references. (NAL Call No.: SB945.F53559 1982).

0044

**The value of plant resistance to soybean cyst nematodes; a case study of Forrest soybeans.**

Bradley, E.B. Duffy, M. Washington, D.C. : The Service. Extract: The use of pest resistant varieties is an important method of preventing crop losses. The past performance of the Forrest soybean variety that is resistant to the soybean cyst nematode is studied. Results indicate that yield loss prevented by use of the Forrest variety accounted for approximately \$401 million (constant 1980 dollars) compared to about a \$1 million cost of developing the variety. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Oct. 1982. Available from NTIS, order no. PB83-149849. Oct 1982. (AGES820929). 42 p. Includes 18 references. (NAL Call No.: 916762(AGE)).

# DISTRIBUTION AND MARKETING

0045

**The economic position of the United States and Louisiana in the world market for soybeans and the future outlook.**

Varela, J. Corty, F. Baton Rouge, La., The Station. Extract: The outlook for soybean exports depends upon a complexity of factors affecting the supply-demand relationships in the world market. On the supply side, one must consider land areas available for production in the various soybean producing countries as well as agricultural policies with associated incentives, subsidies, and controls. On the demand side, one considers competitive products and their relative prices in the world market, also the purchasing power of consumers in the importing nations, size of the consuming sectors, including numbers of animal units, and foreign currency exchange relationships between importing and exporting nations. This publication evaluates the various factors impacting upon the soybean export market and makes projections to the year 1985. D.A.E. research report - Dept. of Agricultural Economics and Agribusiness, Louisiana Agricultural Experiment Station. Jan 1981. Jan 1981. (577). 70 p. Includes ref. (NAL Call No.: 100 L935).

0046

**FEEDSIM description and computer program documentation.**

Holland, F.D. Meekhof, R.L. West Lafayette, The Station. Extract: FEEDSIM.MOD14 is a stochastic simulation model of the corn-soybean market specifically designed to analyze agricultural commodity program alternatives. It incorporates estimated annual production and demand relationships for corn and soybeans, and current price and income support, reserve, and production control programs for these crops. Station bulletin - Dept. of Agricultural Economics, Agricultural Experiment Station, Purdue University. Mar 1979. Mar 1979. (221). 89 p. (NAL Call No.: HD1775.I6I5).

# GRADING, STANDARDS, LABELLING

0047

**Dissipation of  $^{14}\text{C}$  (carbon isotope) N-nitroso-di-N-propylamine (herbicide) from field soil and residue determinations in field-grown soybeans.**  
Berard, D.F. Rainey, D.P. New York, Springer. Bulletin of environmental contamination and toxicology. Sept 1979. v. 23 (1/2). p. 141-144. ill. 4 ref. (NAL Call No.: RA1270.P35A1).

0048

**Distribution of chlorinated pesticides in soybeans, soybean oil, and its by-products during processing (Effectiveness of processing steps on the removal of residues).**  
Chaudry, M.M. Nelson, A.I. Champaign, Ill. Journal American Oil Chemists' Society. Dec 1978. v. 55 (12). p. 851-853. ill. 12 ref. (NAL Call No.: 307.8 J82).

# PLANT SCIENCE

0049

**The value of plant resistance to soybean cyst nematodes; a case study of Forrest soybeans.**  
Bradley, E.B. Duffy, M. Washington, D.C. : The Service. Extract: The use of pest resistant varieties is an important method of preventing crop losses. The past performance of the Forrest soybean variety that is resistant to the soybean cyst nematode is studied. Results indicate that yield loss prevented by use of the Forrest variety accounted for approximately \$401 million (constant 1980 dollars) compared to about a \$1 million cost of developing the variety. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Oct 1982. Available from NTIS, order no. PB83-149849. Oct 1982. (AGES820929). 42 p. Includes 18 references. (NAL Call No.: 916762(AGE)).

# PLANT PRODUCTION - GENERAL

0050

**Annual progress report - 1980 : Northern Research Center, Clarion- Webster Research Center / Iowa State University of Science and Technology.**

1981. This publication contains researched information on planting dates verses plant population, breeding, cold tolerance and Zn, S, K fertilization for corn. Soybean information on brown stem rot and bacterial tan spot is provided. Additional topics include herbicide evaluation, small grain tests, and vegetable garden demonstrations. Document available from: Iowa State Univ., Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011. 24 p. : ill. (NAL Call No.: Not available at NAL.). (NAL Call No.: ORC 80-14,22).

0051

**Centennial, a new soybean variety with nematode resistance (Yields).**

Dunphy, E.J. Brim, C.A. Raleigh, N.C., The Service. AG. North Carolina State University. Agricultural Extension Service. July 1979. July 1979. (174). 4 p. ill. (NAL Call No.: S544.3.N6N62).

0052

**Crop production - soybean project, leader's guide.**

Benson, Garren. 1974. Detailed plans for three meetings to help leaders help 4-H'ers to build project-related skills and knowledge. Document available from: Publications Distribution, Iowa State University, Ames, Iowa 50011. Publication intended for: Leader. Learning experience: Knowledge, skills, practices; Decision making. 7 p. : ill. (NAL Call No.: S533.F6618). (NAL Call No.: 4H-381-E).

0053

**Herbicide to aid soybean (and sunflower) dry down (Paraquat, chemical harvest aids).**

San Francisco, California Farmer. Agrichemical age. Sept/Oct 1979. v. 23 (8). p. 32-33, 49. ill. (NAL Call No.: 381 AG85).

0054

**Seedbed tillage and herbicide influence on soybean (Glycine max) weed control and yield.**

Kapusta, G. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1979. v. 27 (5). p. 520-526. ill. 10 ref. (NAL Call No.: 79.8 W41).

0055

**Soybean desiccation by paraquat, glyphosate, and ametryn (Herbicides) to accelerate harvest.** Whigham, D.K. Stoller, E.W. Madison. Agronomy journal American Society of Agronomy. July/Aug 1979. v. 71 (4). p. 630-633. ill. 4 ref. (NAL Call No.: 4 AM34P).

0056

**Soybean desiccation with paraquat, glyphosate, and ametryn (to hasten soybean maturity to allow early seed harvest).**

Stoller, E.W. Whigham, D.K. Champaign, Ill., The Conference. Proceedings ... annual meeting. North Central Weed Control Conference. 1978. v. 33. p. 68-69. (NAL Call No.: 79.9 N81).

0057

**Soybean handbook (Includes culture, pests and diseases, processing, cost and return planning).**

Manhattan, Kan., The Service. C. Kansas State University. Cooperative Extension Service. May 1978. May 1978. (449). 24 p. ill. (NAL Call No.: 275.29 K13EX).

0058

**The Soybean project.**

Swearingen, Marvin. Hankins, B. J. June 1978. Manual covers Divisions I-IV and Advanced and gives sixteen activities such as seed germination, conducting a herbicide survey, determining harvest losses, and cooking with soybeans. 39 p. : ill. (NAL Call No.: S533.F6616). (NAL Call No.: 4-H 209).

0059

**Soybean response to selected rice herbicides (Leaf injury, yield reduction).**

Eastin, E.F. Madison, Crop Science Society of America. Crop science. Nov/Dec 1978. v. 18 (6). p. 967-968. ill. 3 ref. (NAL Call No.: 64.8 C883).

0060

**Soybean-wheat cropping systems : evaluation of planting methods, varieties, row spacings, and weed control / Charles R. Graves ... (et al.).**

Graves, Charles R. Knoxville University of Tennessee, Agricultural Experiment Station 1980. Cover title. 42 p. : ill. ; 23 cm. -. (NAL Call No.: 100 T255 (1) (no.) 597).

## **(PLANT PRODUCTION - GENERAL)**

**0061**

**Soybeans (Glycine max) as a rescue crop following cyanazine and procyazine application.**  
Brewer, P.E. Slife, F.W. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 263-266. ill. 11 ref. (NAL Call No.: 79.8 W41).

**0062**

**0 (zero)-till soybean culture (in cornstalks and in wheat stubble, varieties, herbicides).**  
McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC.Dixon Springs Agricultural Center. Jan 1979. Jan 1979. (7). p. 61-70. ill. 1 ref. (NAL Call No.: S1.D5).

# PLANT PRODUCTION - HORTICULTURAL CROPS

0063

**Fungicides for control of foliar, pod, and stem diseases of soybeans / H. J. Walters.**

Walters, H. J. Fayetteville Agricultural Experiment Station, University of Arkansas  
1980. Issued Feb. 1980. 31 p. : ill., map. -.  
Bibliography: p. 15. (NAL Call No.: 100 Ar42R no.250).

0064

**Germination techniques and metribuzin bioassay for large-seeded crops (Soybean, corn, cowpeas, herbicide).**

Singh, M.P.FSHA. Phatak, S.C.; Glaze, N.C. Lake Alfred : The Society. Proceedings of the ... annual meeting - Florida State Horticultural Society. 1982. v. 95. p. 336-339. ill. Includes references. (NAL Call No.: 81 F66).

0065

**Soybeans.**

Helsel, Zane R. Document available from:  
Michigan State University, Bulletin Office,  
P.O.Box 231, East Lansing, Michigan 48824 1981.  
Discusses soil and climatic requirements;  
variety; seed selection; land preparation;  
fertilizer needs; planting practices; weed,  
insect, nematode, and disease control;  
harvesting; and storage. 1 sheet : ill. (NAL  
Call No.: Document available from source.)(NAL  
Call No.: EB E-1528).

0066

**Weed pest management in soybean presented by Virginia Tech Extension ; (author, James R. Martin ; editor, S.U. Fleischer).**

Martin, James R. Fleischer, S. J. (Blacksburg, Va.) Virginia Polytechnic Institute and State University (1981?). Pesticide Applicator Training Collection. 66 slides : col. + 1 sound cassette (13:30 mins.) + 1 script. (NAL Call No.: Slide no.26).

# PLANT PRODUCTION - FIELD CROPS

0067

**Agronomic performance of soybeans with differing levels of iron deficiency chlorosis on calcareous soil (Nutritional disorders).** Froehlich, D.M. Fehr, W.R. Madison, Wis., Crop Science Society of America. Crop science. May/June 1981. v. 21 (3). p. 438-441. 8 ref. (NAL Call No.: 64.8 C883).

0068

**Analysis of yield decline in soybeans planted at nonoptimal planting dates, Baton Rouge, 1981 Planting Date Study.** Board, J.E. Baton Rouge, La., The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 107-111. (NAL Call No.: 100 L936).

0069

**Annual progress report - 1980 : Northern Research Center, Clarion- Webster Research Center / Iowa State University of Science and Technology.** 1981. This publication contains researched information on planting dates verses plant population, breeding, cold tolerance and Zn, S, K fertilization for corn. Soybean information on brown stem rot and bacterial tan spot is provided. Additional topics include herbicide evaluation, small grain tests, and vegetable garden demonstrations. Document available from: Iowa State Univ., Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011. 24 p. : ill. (NAL Call No.: Not available at NAL.). (NAL Call No.: ORC 80-14,22).

0070

**Annual progress report-1980 / Iowa State University.** Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1981. This publication discusses the research center experiments on tilling methods, time of planting corn, S and Zn fertilizers, fuel and time requirements for tillage system, organic and chemical farming, soybean bacterial tan spot loss, and pasture nutrient losses. Herbicide evaluation and crop variety tests are included. 19 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: ORC 80-13).

0071

**Balloonvine : biology and control in soybeans / (Eddie R. Jolley ... et.).** Jolley, Eddie R. (Auburn) Alabama Agricultural Experiment Station, Auburn University 1983. Cover title ~"March 1983.". 35 p. : col. ill. : 23 cm. -. (NAL Call No.: 100 AL1S (1) no.547).

0072

**Carabid beetles in soybean agroecosystems (Harpalus pensylvanicus).** House, G.U. All, J.N. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1981. v. 10 (2). p. 194-196. 111. 11 ref. (NAL Call No.: QL461.E532).

0073

**Competition of jimsonweed with soybean (Datura stramonium, Glycine max, weeds, control, herbicide).** Kirkpatrick, B.L. AGUOA. Wax, L.M.; Stoller, E.W. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 833-836. 111. Includes references. (NAL Call No.: 4 AM34P).

0074

**Competition of three malvaceous weed species in soybeans, (Glycine max (L.) Merr.) / by Benny Joe Eaton.** Eaton, Benny Joe, 1943. 1971. Thesis (Ph.D.)--Kansas State University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. v. 68 leaves : 21 cm. Bibliography: leaves 54-56. (NAL Call No.: DISS 71-26,607).

0075

**Control of volunteer corn in soybeans, 1979 (Illinois).** McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC - Dixon Springs Agricultural Center. Jan 1980. Jan 1980. (8). p. 61-62. (NAL Call No.: S1.D5).

0076

**Cotton-soybean rotation for reniform nematode control (Rotylenchulus reniformis, resistant cultivars, cultivars, Louisiana).** Williams, C.LAXBA. Gilman, D.F.; Jones, J.E.; Birchfield, W. Baton Rouge : The Station. Bulletin - Louisiana Agricultural Experiment Station. Jan 1983. Jan 1983. (741). 22 p. Includes references. (NAL Call No.: 100 L93 (1)).

0077

**Crop production as related to irrigation for several crops at different locations: Soybean evapotranspiration and yield response to growth stage water deficits (Glycine max, irrigation timing, stress, Colorado).** Hanks, R.J. Danielson, R.E.; Pruitt, W.O.; Martin, P.E. Logan : The Station. Research report - Utah Agricultural Experiment Station. 1982. 1982. (65). p. 344-367. 111. 11 ref. (NAL

Call No.: S1.U7).

Forestry Experiment Station. Aug 1981. v. 44  
(8). p. 1-2. ill. (NAL Call No.: 100 M69MI).

0078

**Crop rotation vs. monoculture. I. Insect control (Pests of maize, cotton, rice, soybeans, sorghum).**

Barnes, G. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Jan 1980. v. 32 (4). p. 15-17. ill. (NAL Call No.: 6 W55).

0079

**Double cropping winter wheat and soybeans in Indiana.**

Swearingin, Marvin L. Bauman, Thomas T.; Robbins, Paul R.; Edwards, Richard.; Doster, D. Howard.; Parsons, Samuel D. 1979. This publication extensively covers double cropping winter wheat and soybeans in Indiana. The contents of the article covers an overview of double cropping in Indiana. Management suggestions for no-till double cropping, profit potential of double cropping wheat and soybean, weed control in double cropping, insect control, along with harvesting and drying high moisture wheat. Document available from: Mailing Room, Ag. Administration Bldg., Purdue University, West Lafayette, IN 47907. 22 p. : ill. (NAL Call No.: ID-96).

0080

**Early planting of soybeans in cyst-infested soil and the effects on the size and number of nodules (Nematodes, rhizobium, inhibition).**

Pacumbaba, R.P. Sapra, V.T. Normal : The School. Annual research report - School of Agriculture. Environmental Science and Home Economics. Alabama Agricultural and Mechanical University. 1983. 1983. (12th). p. 91-94. ill. Includes references. (NAL Call No.: S537.A2A34).

0081

**Effect of green stink bug (Acrosternum hilare) damage on soybean seed quality before and after storage.**

Miner, F.D. AR. Dumas, B.A. Fayetteville, Ark., The Station. Bulletin - Agricultural Experiment Station, University of Arkansas. Apr 1980. Apr 1980. (844). 19 p. 16 ref. (NAL Call No.: 100 AR42).

0082

**The effect of late-season application of benomyl (Benlate) (fungicide) on yield and quality of soybeans.**

Sciumbato, G.L. Andrews, C.H.; Davis, R.G. Mississippi State, The Station. MAFES research highlights - Mississippi Agricultural &

0083

**Effect of nematocides and application methods on sting nematode (Belonolaimus longicaudatus) control, root nodulation, and yield of soybeans.**

Rhoades, H.L. n.p., The Society. Proceedings - Soil and Crop Science Society of Florida. 1980. v. 39. p. 90-92. 8 ref. (NAL Call No.: 56.9 S032).

0084

**Effect of plant protectant additives used with metribuzin on soybean production and weed control.**

Griffin, J.L. Harger, T.R.; Habetz, R.J. Crowley. Annual progress report Louisiana. Rice Experiment Station. 1980. 1980. (72nd). p. 363-364. (NAL Call No.: 100 L93 (3)).

0085

**Effect of the soybean cyst nematode upon soybean production under different management systems (Continuous cropping of resistant or susceptible soybean varieties, Mississippi).**

Hartwig, E.E. RRMSD. Buehring, N.; Young, L.D. Mississippi State : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Aug 1982. v. 7 (9). 4 p. (NAL Call No.: S79.E37).

0086

**Effects of cultivars and cultural practices on Sclerotinia stem rot of soybean (Sclerotinia sclerotiorum, Whetzelinia sclerotiorum, Glycine max, Wisconsin).**

Grau, C.R. Radke, V.L. St. Paul, American Phytopathological Society. Plant disease. Jan 1984. v. 68 (1). p. 56-58. Includes references. (NAL Call No.: 1.9 P69P).

0087

**Effects of plant and row spacing on dryland soybean yield and water-use efficiency (Glycine max, water stress).**

Alessi, J. Power, J.F. Madison, Wis., American Society of Agronomy. Agronomy journal. Sept/Oct 1982. v. 74 (5). p. 851-854. ill. 18 ref. (NAL Call No.: 4 AM34P).

## (PLANT PRODUCTION - FIELD CROPS)

0088

**Effects of row-spacing, weed control treatment and cultivar on the competitive ability of soybeans.**

Bundick, E.L. Regehr, D.L. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. Northeastern Weed Science Society. p. 95. p. 95. (NAL Call No.: 79.9 N814).

0089

**Effects of weeds on the diversity and abundance of insects in soybeans.**

Shelton, M.D. EVETB. Edwards, C.R. College Park : Entomological Society of America. Environmental entomology. Apr 1983. v. 12 (2). p. 296-298. Includes references. (NAL Call No.: QL461.E532).

0090

**Emergence and yield of fungicide-treated soybean seed differing in quality (Glycine max, control of soil-borne fungi, Phomopsis, cultivars, Iowa).**

Wall, M.T. AGJDA. McGee, D.C.; Burris, J.S. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1983. v. 75 (6). p. 969-973. Includes references. (NAL Call No.: 4 AM34P).

0091

**Evaluating hail-damaged soybeans.**

Hardman, L.L. MN. Hicks, D.R. St. Paul, Minn., The Service. Extension bulletin - Agricultural Extension Service, University of Minnesota. 1980. 1980. (455). 16 p. ill. (NAL Call No.: 275.29 M66S).

0092

**Factors affecting the reaction of soybeans to *Phytophthora megasperma* var. *sojae* in hydroponic culture (Glycine max).**

Keeling, B.L. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 325-327. Includes 4 ref. (NAL Call No.: 64.8 C883).

0093

**Fertilizer reduces yield loss from weather stress (Corn, soybeans, research in Ohio).**

Johnson, J. BCPFA. Atlanta : Potash & Phosphate Institute. Better crops with plant food. Summer 1983. v. 67. p. 6-7. (NAL Call No.: 6 B46).

0094

**Forage production and weed control in a double-cropping program (Avena sativa, Zea mays, Glycine max, Sorghum bicolor, Wisconsin).** Okoli, P.S.O. Drolsom, P.N.; Scholl, J.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1984. v. 76 (3). p. 363-366. Includes references. (NAL Call No.: 4 AM34P).

0095

**Herbicide field trials on field crops, 1980 (Cotton, soybeans, yields).**

Frans, R. McClelland, M.; Terhune, E. Fayetteville, Ark., The Station. Mimeograph series - Arkansas, Agricultural Experiment Station. Apr 1981. (288). 62 p. (NAL Call No.: 100 AR42M).

0096

**Herbicides for soybeans planted in conventional seedbeds, 1979 (Illinois).**

McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC - Dixon Springs Agricultural Center. Jan 1980. Jan 1980. (8). p. 77-84. (NAL Call No.: S1.D5).

0097

**Herbicides for 0-till corn in soybean stubble, 1979 (No-tillage systems, Illinois).**

McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC - Dixon Springs Agricultural Center. Jan 1980. Jan 1980. (8). p. 57-60. Includes 1 ref. (NAL Call No.: S1.D5).

0098

**How to handle herbicide damage (Atrazine, seeding rates, soybeans).**

Watkins, R. Hardwick, C. St. Louis, Mo., American Soybean Association. Soybean digest. May/June 1981. v. 41 (7). p. 60-61. ill. (NAL Call No.: 60.38 S09).

0099

**Identification and evaluation of soil chemical and physical properties limiting root development in Louisiana soils (Soybeans, wheat, minimum tillage, yields).**

Dabney, S.M. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 290-299. ill. (NAL Call No.: 100 L936).

0100

**Impact of ozone on soybean yield (Air pollution).**

Kress, L.W. JEVQA. Miller, J.E. Madison : American Society of Agronomy. Journal of environmental quality. Apr/June 1983. v. 12 (2). p. 276-281. Includes references. (NAL Call No.: QH540.J6).

0101

**Improving the field production environment for soybeans (Cultivation practices, application of fertilizers, crop protection from weeds, insects and diseases).**

Lam-Sanchez, A. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Mar 1981. v. 58 (3). p. 128-130. Includes 15 ref. (NAL Call No.: 307.8 J82).

0102

**Incidence of arthropod predators in different soybean cropping systems (Nabis spp., Geocoris spp., Orius spp., beneficial insects, Virginia).**

McPherson, R.M. Smith, J.C.; Allen, W.A. College Park, Md., Entomological Society of America. Environmental entomology. June 15, 1982. v. 11 (3). p. 685-689. ill. Includes 8 ref. (NAL Call No.: QL461.E532).

0103

**Increased soybean seeding overcomes herbicide effects.**

Pierce, R. Washington, D.C., The Administration. Agricultural research - United States Dept. of Agriculture, Science and Education Administration. June 1981. v. 29 (12). p. 15. ill. (NAL Call No.: 1.98 AG84).

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**Influence of brown stem rot and cropping history on soybean performance (Phialophora gregata, Fungi).**

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## (PLANT PRODUCTION - FIELD CROPS)

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Garner, T.H. Memphis, Tenn., Meister. Cotton. International edition. 1981. 1981. p. 70, 72. ill. (NAL Call No.: 72.8 C8214I).

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**Paraquat as a harvest aid for soybeans.**

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0136

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### **1980 pesticide use on soybeans in the Mississippi Valley.**

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Ersek, T. Holliday, M.; Keen, N.T. St. Paul, American Phytopathological Society. Phytopathology. June 1982. v. 72 (6). p. 628-631. ill. 15 ref. (NAL Call No.: 464.8 P56).

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Frank, S.J. AGUOA. Fehr, W.R. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 451-454. Includes references. (NAL Call No.: 4 AM34P).

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Nickell, C.D. ISSODB. Urbana : International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 73. (NAL Call No.: TX558.S715).

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Hartwig, E.E. St. Paul, Minn., American Phytopathological Society. Plant disease. Apr 1981. v. 65 (4). p. 303-307. 16 ref. (NAL Call No.: 1.9 P69P).

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**Breeding soybeans resistant to diseases.**

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Almeida, A.M.R. Kiihl, R.A.S.; Almeida, L.A. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 18-21. 4 ref. (NAL Call No.: aSB205.S7S6).

0149

**Comparative resistance of multiple insect-resistant soybean genotypes to the soybean looper (*Pseudoplusia includens*, *Epilachna*, *Ceratomya trifurcata*, *Heliothis*).**

Smith, C.M. Gilman, D.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 1981. v. 74 (4). p. 400-403. ill. 15 ref. (NAL Call No.: 421 J822).

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**Comparison of 3 soybean cyst nematode resistance genes from two sources.**

Myers, O. Jr. Unander, D.W. Carbondale, Ill., Southern Illinois University. AG review Southern Illinois University. School of Agriculture. 1981. 1981. p. PLSS66. (NAL Call No.: S537.S556).

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**Competition and alleloathy between soybeans and weeds (*Abutilon theophrasti*, *Setaria italica*, phytotoxins, comparisons of soybean cultivars).**

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Gumisiriza, G. Kueneman, E.A. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 87-91. 8 ref. (NAL Call No.: aSB205.S7S6).

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0153

**Control of iron-deficiency chlorosis in soybeans by plant breeding (Glycine max).**

Fehr, W.R. New York ; Basel : Marcel Dekker, 1982. Iron nutrition and interactions in plants : Brigham Young University, August 12-14, 1981 / edited by S.D. Nelson ... (et al.). p. 611-621. 11 ref. (NAL Call No.: QK867.J67 v. 5, nos. 4-7).

0154

**Cooperation spurs resistant soybeans (Phialophora gregata, brown stem rot, varieties, Iowa).**

Pierce, R. SEA-AR-NC. Washington, D.C., The Administration. Extension review - United States Department of Agriculture, Science and Education Administration. Summer 1980. v. 51 (3). p. 24-25. ill. (NAL Call No.: 1 EX892EX).

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Fehr, W.R. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1984. Presented at the "Second International Symposium on Iron Nutrition and Interactions in Plants," August 2-5, 1983, Utah State University, Logan. v. 7 (1/5). p. 347-354. Includes references. (NAL Call No.: QK867.J67).

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Singh, B.B. Jha, A.N. New Delhi, Indian Society of Genetics & Plant Breeding. Indian journal of genetics & plant breeding. July 1978. v. 38 (2). p. 228-230. ill. 1 ref. (NAL Call No.: 64.8 IN2).

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**Developments in crop protection of Glycine (soybeans, includes breeding for disease and pest resistance).**

Yang, C.Y. Reprints - United States Dept. of Agriculture. 113 ref. (NAL Call No.: aS21.A8U5/USDA).

0158

**Effect of a resistant soybean genotype on the development of the soybean looper (Lepidoptera: Noctuidae) and an introduced parasitoid, Microplitis demolitor Wilkinson (Hymenoptera: Braconidae) (Pseudoplusia includens).**

Yanes, J. Jr. EVETB. Boethel, D.J. College Park : Entomological Society of America. Environmental entomology. Aug 1983. v. 12 (4). p. 1270-1274. Includes references. (NAL Call

No.: QL461.E532).

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**The effect of parentage on the control of volunteer corn (Zea mays) in soybeans (Glycine max) (Weeds, herbicides, diclofop, glyphosate).**

Andersen, R.N. Geadelmann, J.L. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1982. v. 30 (2). p. 127-131. ill. Includes 5 ref. (NAL Call No.: 79.8 W41).

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**Effect of planting dates and soybean cultivars on pod damage by corn earworm (Heliothis zea, resistance).**

Joshi, J.M. USDA. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1980. v. 20 (1). p. 59-63. ill. 6 ref. (NAL Call No.: 64.8 C883).

0161

**Effects of natural selection in segregating soybean populations exposed to Phytophthora rot or soybean cyst nematode (Phytophthora megasperma, Heterodera glycines, breeding programs).**

Hartwig, E.E. Kilen, T.C.; Young, L.D.; Edwards, C.J. Jr. Madison, Wis., Crop Science Society of America. Crop science. May/June 1982. v. 22 (3). p. 588-590. 6 ref. (NAL Call No.: 64.8 C883).

0162

**Evaluation of resistance in soybeans to soybean mosaic virus strains (Cultivars).**

Cho, E.K. CRPSA. Goodman, R.M. Madison : Crop Science Society of America. Crop science. Nov/Dec 1982. v. 22 (6). p. 1133-1136. 16 ref. (NAL Call No.: 64.8 C883).

0163

**Evaluation of selected soybean lines for nematode resistance.**

Harville, B. Wellemeyer, E. Baton Rouge, La., The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. p. 143-145. (NAL Call No.: 100 L936).

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**Evaluation of soybean lines for soybean looper damage from S-154 Regional project (Breeding, resistance, Louisiana).**

Harville, B.G. Elkins, M. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of

Agronomy. 1982. 1982. p. 275. (NAL Call No.: 100 L936).

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**Evaluation of soybean lines selected for insect resistance.**

Gilman, D.F. Elkins, M.; Smith, C.M. Baton Rouge, The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1980. 1980. p. 116-117. (NAL Call No.: 100 L936).

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**Field and laboratory evaluations of soybean lines for resistance to corn earworm (*Heliothis zea*) leaf feeding).**

Smith, C.M. Brim, C.A. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 78-80. ill. 6 ref. (NAL Call No.: 421 J822).

0168

**Field evaluation of soybean lines to Wartell race of root-knot nematode (Resistance).**

Harville, B.G. Dunigan, E.P.; Birchfield, W.; Green, A. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 266-267. (NAL Call No.: 100 L936).

0169

**Four genes controlling root fluorescence in soybean (*Glycine max*).**

Delannay, X. Palmer, R.G. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 278-281. Includes ref. (NAL Call No.: 64.8 C883).

0170

**The genetic basis of physiological races of *Phytophthora* (Soybean association, root rot).**

Leudders, V.D. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 135-139. 13 ref. (NAL Call No.:

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**Genetic control of chloroplast pigment development in soybeans as a function of leaf and plant maturity.**

Eskins, K. Harris, L.; Bernard, R.L. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Apr 1981. v. 67 (4). p. 759-762. ill. 17 ref. (NAL Call No.: 450 P692).

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**Genetic control of hypocotyl pigmentation among white-flowered soybeans grown in continuous light.**

Palmer, R.G. Payne, R.C. Madison, Crop Science Society of America. Crop science. Jan/Feb 1979. v. 19 (1). p. 124-126. ill. 12 ref. (NAL Call No.: 64.8 C883).

0173

**Genetic control of iron deficiency chlorosis in soybeans.**

Cianzio, S.R. de. Fehr, W.R. Ames, Iowa State University. Iowa state journal of research. Feb 1980. v. 54 (3). p. 367-375. ill. 10 ref. (NAL Call No.: 470 I09).

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**Genetic control of productivity, responsiveness and stability for different groups of traits in soybeans.**

Gupta, V.P. Garg, I.K.; Rana, N.D. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 53-58. 13 ref. (NAL Call No.: aSB205.S7S6).

0175

**Genetic control of seed longevity in soybeans.**

Kueneman, E.A. CRPSA. Madison : Crop Science Society of America. Crop science. Jan/Feb 1983. v. 23 (1). p. 5-8. Includes references. (NAL Call No.: 64.8 C883).

0176

**Genetic implications of the susceptibility of Kent soybean to *Cercospora soja* (Frogeye leafspot, *Glycine max*, cultivars).**

Boerma, H.R. PHYTAJ. Phillips, D.V. St. Paul : American Phytopathological Society. Phytopathology. Dec 1983. v. 73 (12). p. 1666-1668. Includes references. (NAL Call No.: 464.8 P56).

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0177

**Genetic variability for resistance to propanil (herbicide) injury in soybeans.**  
Karazawa, M. Caviness, C.E. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 739-740. ill. 14 ref. (NAL Call No.: 64.8 C883).

0178

**Genetics of resistance to Phytophthora rot in soybean cultivar PI 171442.**  
Kilen, T.C. Keeling, B.L. Madison, Wis., Crop Science Society of America. Crop science. Nov/Dec 1981. v. 21 (6). p. 873-875. 10 ref. (NAL Call No.: 64.8 C883).

0179

**Genetics of the cyst nematode-soybean symbiosis (Heterodera glycines, Glycine max).**  
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**Identification of sources of resistance to limabean podborer (Lepidoptera: Tyralidae) in soybean (Etiella zinckenella, Glycine max).**  
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**Inheritance of resistance to soybean pod borer in soybeans (*Leguminivora glycinivorella*).**

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0199

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0201

**Methanol stress as a test of seed vigor (Peas, soybeans, cultivars, germination).**  
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0205

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Athow, K.L. AR-NC. Laviolette, F.A.; Mueller, E.H.; Wilcox, J.R. St. Paul, Minn., American Phytopathological Society. Phytopathology. Oct 1980. v. 70 (10). p. 977-980. 7 ref. (NAL Call No.: 464.8 P56).

0206

**New soybean strain resistant to soybean cyst nematode: PI 416.762 (Glycine max, Heterodera glycines).**  
Anand, S.C. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1982. v. 66 (10). p. 933-934. 3 ref. (NAL Call No.: 1.9 P69P).

0207

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0209

**Population dynamics of Criconemoides simile on soybean (Ring nematode, soybean cultivars).**  
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0210

**Preliminary soybean looper resistance study (Pseudoplusia includens, soybean breeding lines).**  
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0211

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0212

**Prescribed resistant cultivars for controlling brown stem rot of soybean and managing resistance genes (Phialophora gregata).**  
Tachibana, H. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1982. v. 66 c (3). p. 271-273. ill. Includes 3 ref. (NAL Call No.: 1.9 P69P).

0213

Production of conidia by *Cerecosora kikuchii* in culture (Soybean breeding for resistance). Vathakos, M.G. Walters, H.J. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1979. Aug 1979. . 69 (8). p. 832-833. 12 ref. (NAL Call No.: 464.8 P56).

0214

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Chiang, H.S. Norris, D.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 121-125. ill. Includes references. (NAL Call No.: 421 J822).

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Reaction of soybean cultivars to Temik (aldicarb) and inheritance of the reaction (Insecticides, tolerance).

Kiithl, R.A.S. Almeida, L.A. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 17-18. (NAL Call No.: aSB205.S7S6).

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Resistance in soybeans to the southern green stink bug (*Nezara viridula*, U.S., particularly in Louisiana and other Gulf Coast states).

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Resistance of soybean cultivars and plant introductions to damage by soybean borer (*Etiella zinckenella*).

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0218

Resistance of soybean cultivars to *Sclerotinia sclerotiorum*.

Grau, C.R. Radke, V.L.; Gillespie, F.L. St. Paul, Minn., American Phytopathological Society. Plant disease. June 1982. v. 66 (6). p. 506-508. ill. Includes 15 ref. (NAL Call No.: 1.9 P69P).

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Orellana, R.G. St. Paul, Minn., American Phytopathological Society. Plant disease. July 1981. v. 65 (7). p. 594-595. Includes 12 ref. (NAL Call No.: 1.9 P69P).

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Smith, C.M. Brim, C.A. Madison, Crop Science Society of America. Crop science. May/June 1979. v. 19 (3). p. 313-314. ill. 8 ref. (NAL Call No.: 64.8 C883).

0221

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0222

Response of resistant and susceptible soybean cultivars to continuous cropping in area infested with cyst nematode (*Heterodera glycines*, North Carolina).

Hartwig, E.E. Epps, J.M.; Buehring, N. St. Paul, Minn., American Phytopathological Society. Plant disease. Jan 1982. v. 66 (1). p. 18-20. 4 ref. (NAL Call No.: 1.9 P69P).

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0224

Ridomil fungicide as a seed and soil treatment versus genetic resistance for control *Phytophthora* rot of soybeans, 1979 (Soybean (*Glycine max* 'Marshall', 'Harosoy', 'Corsoy', 'Harcor', 'Vickery'), pre- and postemergence damping-off, root rot, *Phytophthora megasperma* var. *sojae*).

Tachibana, H. Thompson, R.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 193-194. (NAL Call No.: 464.9 AM31R).

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0225

Ridomil fungicide as a seed and soil treatment vs genetic resistance for control of Phytophthora rot of soybeans, 1980 (Soybean (Glycine max 'Marshall', 'Corsoy', 'Harcor', 'Vickery'), pre- and postemergence damping-off, root rot Phytophthora megasperma, Phytophthora megasperma var sojae).

Tachibana, H. Hatfield, J.D. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 164-165. (NAL Call No.: 464.9 AM31R).

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Rps 6, a major gene for resistance to Phytophthora megasperma f. sp. glycinea in soybean (Glycine max).

Athow, K.L. PHYTA. Laviolette, F.A. St. Paul : American Phytopathological Society. Phytopathology. Dec 1982. v. 72 (12). p. 1564-1567. 10 ref. (NAL Call No.: 464.8 P56).

0227

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0228

Screening and selecting of improved soybean germplasms for resistance to soybean cyst nematode (SCN) and other soybean diseases in Alabama (Heterodera glycines).

Pacumbaba, R.P. Sapra, V.T. Normal : The School. Annual research report - School of Agriculture. Environmental Science and Home Economics. Alabama Agricultural and Mechanical University. 1983. 1983. (12th). p. 99-102. maps. Includes references. (NAL Call No.: S537.A2A34).

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0230

Screening methodology for resistance to field weathering of soybean seed (Genotypes, Phomopsis pathogens, seed storability).

Dassou, S. Kueneman, E.A. Madison, Wis. : Crop Science Society of America. Crop science. July/Aug 1984. v. 24 (4). p. 774-779. ill. Includes references. (NAL Call No.: 64.8 C883).

0231

Screening soybean for resistance to Heterodera glycines ichinohe using monoxenic cultures (Breeding lines, glycine max).

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0232

A second gene for resistance to peanut mottle virus in soybeans.

Shipe, E.R. Buss, G.R. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 656-658. ill. 18 ref. (NAL Call No.: 64.8 C883).

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A second report on induced mutations for soybean rust resistance.

Smutkupt, S. Wongpiyasatid, A.; Lamseejan, S. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 103-107. 3 ref. (NAL Call No.: aSB205.S7S6).

0234

A seedling test for resistance to soybean stem canker caused by Diaporthe phaseolorum var. caulivora (Glycine max).

Keeling, B.L. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 807-809. ill. 11 ref. (NAL Call No.: 464.8 P56).

0235

Selection for aluminum tolerance in soybeans based on seedling-root growth (Toxicity).

Hanson, W.D. Kamprath, E.J. Madison. Agronomy journal American Society of Agronomy. July/Aug 1979. v. 71 (4). p. 581-586. ill. 16 ref. (NAL Call No.: 4 AM34P).

0236

**Selection for resistance to four races of *Phytophthora megasperma* var. *sojae* in soybean.**  
Kilen, T.C. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 581-582. ill. 8 ref. (NAL Call No.: 64.8 C883).

0237

**Simultaneous selection for yield and resistance to brown stem rot of soybean in hill plots (*Phialophora gregata*, cultivars).**  
Ertl, D.S. CRPSA. Fehr, W.R. Madison : Crop Science Society of America. Crop science. July/Aug 1982. v. 23 (4). p. 680-682. Includes references. (NAL Call No.: 64.8 C883).

0238

**Soybean and mite interaction: effects of cultivar and plant growth stage (*Tetranychus urticae*).**  
Rodriguez, J.G. JKESA. Reicosky, D.A.; Patterson, C.G. Lawrence : The Society. Journal of the Kansas Entomological Society. July 1983. v. 56 (3). p. 320-326. Includes references. (NAL Call No.: 420 K13).

0239

**Soybean breeding for resistance to foliage feeding arthropods.**  
Paschal, E.H. II. TX-AR-SO. Rogers, C.E. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. July 1980. July 1980. (1451). p. 390-397. Bibliography p. 396-397. (NAL Call No.: 100 T31M).

0240

**Soybean emergence in clay soil and tolerance to phytophthora rot (*Phytophthora megasperma*, cultivars).**  
Buzzell, R.I. Anderson, T.R. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 29-30. 2 ref. (NAL Call No.: aSB205.S7S6).

0241

**Soybean resistance to adults of lucerne crown borer, *Zygrita diva* Thomson (Coleoptera: Cerambycidae).**  
Shepard, M. Keerati-Kasikorn, M.; Blood, P.R.B.; Morgan, D. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Jan 1981. v. 16 (1). p. 34-40. ill. 13 ref. (NAL Call No.: QL461.G4).

0242

**Soybean varieties: fungicide seed treatments, foliar fungicides, nematocides.**  
Schmitt, D.P. Ross, J.P. Raleigh, N.C., The Service. AG - North Carolina State University, Agricultural Extension Service. Aug 1980. Aug 1980. (218, suppl.). 4 p. (NAL Call No.: S544.3.N6N62).

0243

**A study of soybeans and rhizobia tolerance to low phosphorus - high aluminum in acid soils (Cultivars).**  
Taylor, R.W. Patel, S. Normal : The School. Annual research report - School of Agriculture. Environmental Science and Home Economics. Alabama Agricultural and Mechanical University. 1983. 1983. (12th). p. 113-120. ill. Includes references. (NAL Call No.: S537.A2A34).

0244

**Susceptibility of six soybean cultivars to *Meloidogyne incognita* race 4 (USA, Puerto Rico).**  
Acosta, N. NMTPA. Negrón, J.A. Auburn : Organization of Tropical American Nematologists. Nematotropa. Dec 1982. v. 12 (2). p. 181-187. ill. Includes references. (NAL Call No.: SB998.N4N4).

0245

**Susceptibility of soybean cultivars and lines to *Pratylenchus hexincisus*.**  
Zirakparvar, M.E. Ames, Iowa, Society of Nematologists. Journal of nematology. Apr 1982. v. 14 (2). p. 217-220. Includes 11 ref. (NAL Call No.: QL391.N4J62).

0246

**Tolerance/resistance to soybean mosaic virus (Heritability).**  
Buzzell, R.I. Ames : The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1983. v. 10. p. 9-10. Includes references. (NAL Call No.: aSB205.S7S6).

0247

**Two genes for resistance to race 5 of *Cercospora sojae* in soybeans (Frogeye leafspot, *Glycine max*).**  
Phillips, D.V. Boerma, H.R. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 764-766. 9 ref. (NAL Call No.: 464.8 P56).

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**0248**

**Use of bicarbonate in screening soybeans for resistance to iron chlorosis (Soybeans, cultivars, genetics).**

Coulombe, B.A. Chaney, R.L.; Wiebold, W.J. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1984. Presented at the "Second International Symposium on Iron Nutrition and Interactions in Plants," August 2-5, 1983, Utah State University, Logan. v. 7 (1/5). p. 411-425. ill. Includes references. (NAL Call No.: QK867.J67).

**0249**

**Yield of indeterminate soybeans in response to multiple periods of soil-water stress during reproduction (Glycine max, cultivars).**

Snyder, R.L. Carlson, R.E.; Shaw, R.H. Madison, Wis., American Society of Agronomy. Agronomy journal. Sept/Oct 1982. v. 74 (5). p. 855-859. 2 p. ref. (NAL Call No.: 4 AM34P).

# PLANT ECOLOGY

0250

Effects of cultural practices on natural enemies (Beneficial arthropod dynamics in soybean, role of plant phenology, pest control implications).

Mayse, M.SCSBA. Pitre, H.N.; Whitcomb, W.  
Mississippi State : Mississippi Agricultural  
and Forestry Experiment Station. Southern  
cooperative series bulletin. June 1983.  
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(285). p. 49-55. Includes references. (NAL Call  
No.: 100 G29S0).

# PLANT STRUCTURE

0251

**Critical stages of development for defoliation of soybean (Yield components, economic-injury level).**

Fehr, W.R. Lawrence, B.K.; Thompson, T.A. Madison, Wis., Crop Science Society of America. Crop science. Mar 1981. v. 21 (2). p. 259-262. 11 ref. (NAL Call No.: 64.8 C883).

0252

**Cytopathology of soybean tissue culture cells infected with southern bean mosaic virus.**

Wu, F.S. Hooper, G.R.; Murskishi, H.M. Gaithersburg, Md., The Association. In vitro; journal of the Tissue Culture Association. June 1982. v. 18 (6). p. 525-530. 111. 10 ref. (NAL Call No.: QH585.A1I58).

0253

**Early events of pathogenesis of zoospores of Phytophthora megasperma f. sp. Glycinea on resistant and susceptible soybean roots (Scanning electron microscopy).**

Ristaino, J.B. Rissler, J.F. College Park, Md. : Univ. of Maryland, Electron Microsc Cent Facil, Dept. of Mechanical Engineering. Newsletter - Electron Microscope Central Facility. Apr 1983. Apr 1983. (11). p. 15-17. 111. Includes references. (NAL Call No.: QH212.E4E4).

0254

**Histopathology of susceptible and resistant soybean roots inoculated with zoospores of Phytophthora megasperma f. sp. glycinea (Glycine max).**

Beagle-Ristaino, J.F. PHYTA. Rissler, J.F. St. Paul : American Phytopathological Society. Phytopathology. Apr 1983. v. 73 (4). p. 590-595. 111. Includes references. (NAL Call No.: 464.8 P56).

0255

**Root system characteristics of two soybean isolines undergoing water stress conditions (Glycine max, Nebraska).**

Garay, A.F. AGUOA. Wilhelm, W.W. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1983. v. 75 (6). p. 973-977. 111. Includes references. (NAL Call No.: 4 AM34P).

0256

**Studies on the role of wall extensibility in the control of cell expansion (Soybeans, peas, maize, cucumbers).**

Coartney, J.S. Morre, D.J. Chicago, University of Chicago Press. Botanical gazette. Mar 1980. v. 141 (1). p. 56-62. 111. 20 ref. (NAL Call

No.: 450 B652).

0257

**Ultrastructural cytology of soybean infected with mild and severe strains of soybean mosaic virus (Glycine max).**

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**The effect of benomyl (fungicide) applications to soybean plants on hilum color (Cultivars).**  
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0269

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0271

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0276

**Foliage injury, nutrient intake, and yield of soybeans as influenced by foliar fertilization.**  
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0277

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**Interactions between a vesicular-arbuscular mycorrhizal fungus (*Glomus macrocarpus*) and root-knot nematode (*Meloidogyne incognita*) on soybean.**

Kellam, M.K. Schenck, N.C. St. Paul, Minn., American Phytopathological Society. Phytopathology. Apr 1980. v. 70 (4). p. 293-296. 111. 21 ref. (NAL Call No.: 464.8 P56).

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**Internally seedborne fungi of soybean in Puerto Rico and their effect on seed germination and field emergence.**

Ellis, M.A. Paschal, E.H. Guildford. Tropical agriculture. Apr 1979. v. 56 (2). p. 171-174. 111. 8 ref. (NAL Call No.: 26 T754).

0286

**Introduction of effective N<sub>2</sub>-fixing rhizobial strains into the soybean plant by use of fungicide resistance (Fungicide-resistant mutants of *Rhizobium japonicum*, nodulation, nitrogen fixation).**

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Salawu, E.O. Estey, R.H. Saint-Hyacinthe, Quebec, Quebec Society for the Protection of Plants. Phytoprotection. June 1979. v. 60 (2). p. 99-102. 111. 9 ref. (NAL Call No.: 464.8 P566).

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**Plant genotype differences to ferrous and total iron in emerging leaves. II. Dry beans and soybeans (Uptake and deficiency).**  
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**Potash and foliar fungicides team-up to increase yields (Tennessee soybean research).**  
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0296

**Potassium fertilization effects on Phomopsis seed infection, seed quality, and yield of soybeans (Glycine max).**  
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0298

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0300

**Response of soybeans to high temperature during germination (Includes cultivars, seed quality).**  
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White, M.C. Chaney, R.L. Madison, Crop Science Society of America. Crop science. Jan/Feb 1979. v. 19 (1). p. 126-128. ill. 18 ref. (NAL Call No.: 64.8 C883).

0303

**The seed-borne nature of some soybean pathogens, the effect of Phomopsis spp. and Bacillus subtilis on germination, and their occurrence in soybeans produced in Illinois.**  
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Madison, Wis., American Society of Agronomy.  
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0306

**Specific effects of soybean mosaic virus on  
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N<sub>2</sub>-fixation activity in *Glycine max* and *Glycine*  
*soja* (Soybeans and wild annual soybeans).**

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# PLANT PHYSIOLOGY AND BIOCHEMISTRY

0307

**Activity of trypsin and chymotrypsin inhibitors of soybean forms with different resistance to soybean borer (Soybean varieties).**

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0308

**Allelopathic mechanisms of velvetleaf (*Abutilon theophrasti* Medic., Malvaceae) on soybean (Weed, plant production interference).**

Colton, G.E. Einhellig, F.A. Columbus, Ohio, Botanical Society of America. American journal of botany. Nov/Dec 1980. v. 67 (10). p. 1407-1413. 37 ref. (NAL Call No.: 450 AM36).

0309

**ASA-610 ability to detect changes in soybean seed quality (Vigor, seed deterioration).**

McDonald, M.B. Jr. Wilson, D.O. East Lansing, Association of Official Seed Analysts. Journal of seed technology. 1980. v. 5 (1). p. 56-66. 17 ref. (NAL Call No.: SB113.2.U6).

0310

**Association of volatile aldehyde production during germination with poor soybean and pea seed quality (Soilborne fungi and bacteria, vigor and viability).**

Harman, G.E. Nedrow, B.L.; Clark, B.E.; Mattick, L.R. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1982. v. 22 (4). p. 712-716. ill. 19 ref. (NAL Call No.: 64.8 C883).

0311

**Characterization of solute efflux from dehydration injured soybean (*Glycine max* L. Merr) seeds.**

Senaratna, T.PLPHA. McKersie, B.D. Rockville : American Society of Plant Physiologists. Plant physiology. Aug 1983. v. 72 (4). p. 911-914. Includes references. (NAL Call No.: 450 P692).

0312

**Comparative metabolism of (the herbicide) 2,4-dichlorophenoxyacetic acid in cotyledon and leaf callus from two varieties of soybean.**

Davidonis, G.H. Hamilton, R.H.; Mumma, R.O. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. Jan 1980. v. 65 (1). p. 94-97. ill. 8 ref. (NAL Call No.: 450 P692).

0313

**Dehydration injury in germinating soybean (*Glycine max* L. Merr.) seeds.**

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0314

**Effect of date of harvest maturity on soybean seed quality and *Phomopsis* sp. seed infection (*Glycine max*, germination vigor).**

TeKrony, D.M. Egli, D.B.; Bales, J.; Tomes, L.; Stuckey, R.E. Madison : Crop Science Society of America. Crop science. Jan/Feb 1984. v. 24 (1). p. 189-193. Includes references. (NAL Call No.: 64.8 C883).

0315

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Meckel, L. Efli, D.B.; Phillips, R.E.; Radcliffe, D.; Leggett, J.E. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1984. v. 76 (4). p. 647-650. ill. Includes references. (NAL Call No.: 4 AM34P).

0316

**Effect of temperature and relative humidity on translocation of <sup>14</sup>C-metribiflufen in johnsongrass (*Sorghum halepense*) and soybean (*Glycine max*) (Herbicide).**

McWhorter, C.G. Champaign, Ill., Weed Science Society of America. Weed science. Jan 1981. v. 29 (1). p. 87-93. ill. 14 ref. (NAL Call No.: 79.8 W41).

0317

**Effects of carbofuran and water stress on growth of soybean plants and twospotted spider mite (*Acari: Tetranychidae*) populations under greenhouse conditions (*Tetranychus urticae*).**

Mellors, W.K. Allegro, A.; Nsu, A.N. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1984. v. 13 (2). p. 561-567. Includes references. (NAL Call No.: QL461.E532).

0318

**Effects of simulated ozone and sulfur dioxide fumigations on soybeans in open-top field chambers (Air pollution).**

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0319

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Davis, L.C. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. July 1980. v. 66 (1). p. 126-129. ill. 12 ref. (NAL Call No.: 450 P692).

0320

Exudation of glyphosate from wheat (*Triticum aestivum*) plants and its effects on interplanted corn (*Zea mays*) and soybeans (*Glycine max*) (Growth regulator, herbicide uptake, no-tillage).

Rodrigues, J.U.V. Worsham, A.D.; Corbin, F.T. Champaign, Ill., Weed Science Society of America. Weed science. May 1982. v. 30 (3). p. 316-320. Includes 22 ref. (NAL Call No.: 79.8 W41).

0321

Factors in depression of the apical growth of plants treated with hormonal herbicides (*Glycine max*, soybeans, green beans).

Petelina, G.G. Mikityuk, D.D.; Makeev, A.M.; Makoveichuk, A.Yu.; Chkanikov, D.I. New York, N.Y., Consultants Bureau. Soviet plant physiology. Mar/Apr 1982. Translated from: *Fiziologiya rastenii*, p. 282-285. (450 F58). v. 29 (2,pt.1). p. 214-217. 6 ref. (NAL Call No.: 450 F58AE).

0322

The factors of three herbicides on the growth factors and N<sub>2</sub> (nitrogen)-fixation of two soybean cultivars (Stimulatory and inhibitory effects, Louisiana).

Chin, K.L. Abayneh, T.; Lee, W.U. Baton Rouge, La.: The University. Research bulletin - Southern University. Sept 1, 1983. v. 5 (1). p. 26-37. ill. Includes references. (NAL Call No.: S539.5.R42).

0323

Fate of MBR-18337 in soybean (*Glycine max*) and Johnsongrass (*Sorghum halepense*) plants and cell cultures (Herbicide, plant growth regulators).

Swisher, B.A. WEESA. Corbin, F.T. Champaign: Weed Science Society of America. Weed science. Mar 1983. v. 31 (2). p. 242-246. ill. Includes references. (NAL Call No.: 79.8 W41).

0324

Foliar fatty acids and sterols of soybean field fumigated with SO<sub>2</sub> (sulfur dioxide).

Grunwald, C. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Oct 1981. v. 68 (4). p. 868-871. 21 ref. (NAL Call No.: 450 P692).

0325

Four genes controlling root fluorescence in soybean (*Glycine max*).

Delannay, X. Palmer, R.G. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 278-281. Includes ref. (NAL Call No.: 64.8 C883).

0326

Fungal effects on *Rhizobium japonicum*-soybean symbiosis (Antagonism Mycotoxins).

Angle, J.S. Pugashetti, B.K.; Wagner, G.H. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1981. v. 73 (2). p. 301-306. ill. 16 ref. (NAL Call No.: 4 AM34P).

0327

Genetic control of chloroplast pigment development in soybeans as a function of leaf and plant maturity.

Eskins, K. Harris, L.; Bernard, R.L. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Apr 1981. v. 67 (4). p. 759-762. ill. 17 ref. (NAL Call No.: 450 P692).

0328

Glyceollin: a site-specific inhibitor of electron transport in isolated soybean mitochondria (*Glycine max*, *Zea mays*, maize, autophytotoxicity).

Boydston, R. PLPHA. Paxton, J.D.; Koeppe, D.E. Rockville: American Society of Plant Physiologists. Plant physiology. May 1983. v. 72 (1). p. 151-155. Includes references. (NAL Call No.: 450 P692).

0329

Host-pathogen interactions. XVII. Hydrolysis of biologically active fungal glucans by enzymes isolated from soybean cells (*Phytophthora megasperma*, phytoalexins).

Cline, K. Albersheim, P. Rockville, Md., American Society of Plant Physiologists. Plant physiology. July 1981. v. 68 (1). p. 221-228. ill. 19 ref. (NAL Call No.: 450 P692).

0330

**Host-pathogen interactions. XVIII. Isolation and biological activity of glycinol, a pterocarpan phytoalexin synthesized by soybeans.**

Weinstein, L.I. Hahn, M.G.; Albersheim, P. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Aug 1981. v. 68 (2). p. 358-363. ill. 24 ref. (NAL Call No.: 450 P692).

0331

**Increase in germination and vigor level of soybean seeds by benomyl field treatments.**

Tao, K.L.J. AMS. Schoen, J.F.; Payne, R.C. n.p., The Association. The News letter of the Association of Official Seed Analysts. May 1980. v. 54 (2). p. 44-49. 15 ref. (NAL Call No.: 61.9 AS7N).

0332

**Influence of the herbicides hexazinone and chlorsulfuron on the metabolism of isolated soybean leaf cells (Photosynthetic inhibitor).**

Hatzios, K.K. Howe, C.M. New York, Academic Press. Pesticide biochemistry and physiology. June 1982. v. 17 (3). p. 207-214. 21 ref. (NAL Call No.: SB951.P49).

0333

**Influence of water stress on the diurnal exchange of mass and energy between the atmosphere and a soybean canopy (Glycine max, Nebraska).**

Baldocchi, D.D. AGJDA. Verma, S.B.; Rosenberg, N.J.; Blad, B.L.; Garay, A. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 543-548. ill. Includes references. (NAL Call No.: 4 AM34P).

0334

**Interaction of mineral and cytokinin supply in control of leaf senescence and seed growth in soybean explants (Glycine max).**

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0335

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Shukle, R.H. EVETB. Murdock, L.L. College Park : Entomological Society of America. Environmental entomology. June 1983. v. 12 (3). p. 787-791. Includes references. (NAL Call No.: QL461.E532).

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**Metabolism of AC 206,784 herbicide (2-chloro-N-(2,3-dimethylphenyl)-N-(1-methylethyl)acetamide) in soybean plants (Glycine max).**

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0339

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**Selectivity mechanisms for foliar applications of diclofop-methyl. II. Metabolism (Studies with weeds, proso millet, soybeans and cucumber, uptake, tolerance).**

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0348

**Stability of soybean harvest index (within cultivars, Drought stress effects, interplant competition, Florida, New York).**

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0349

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0350

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0351

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# PLANT TAXONOMY AND GEOGRAPHY

0352

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0353

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# PROTECTION OF PLANTS

0354

**Alachlor and trifluralin (herbicides) effects on nutrient uptake in oats and soybeans (Inhibition of root and shoot growth).**  
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0355

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**Comparative phytotoxicity of several nitrification inhibitors to soybean plants.**  
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0358

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0359

**Continuous beans don't have to mean continuous problems (Control of insects and diseases in soybeans).**  
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0360

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0361

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0364

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**Differential cultivar tolerance in soybean to phytotoxic levels of soil Zn. II. Range of Zn additions and the uptake and translocation of Zn, Mn, Fe, and P (Zinc, manganese, iron, and phosphorus).**  
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0366

Differential responses of plant foliage (*Tradescantia* sp., *Pteridium aquilinum*, *Quercus palustris*, and soybeans) to simulated acid rain (Air pollutants, adverse effects).  
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0367

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0368

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0369

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0370

Dissipation of <sup>14</sup>C (carbon isotope) N-nitroso-di-N-propylamine (herbicide) from field soil and residue determinations in field-grown soybeans.  
Berard, D.F. Rainey, D.P. New York, Springer. Bulletin of environmental contamination and toxicology. Sept 1979. v. 23 (1/2). p. 141-144. ill. 4 ref. (NAL Call No.: RA1270.P35A1).

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The distribution of the soybean cyst nematode, *Heterodera glycines* in Louisiana.  
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0372

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0373

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Welch, E.R. May, R.D. Dallas. The Cotton gin and oil mill press. Feb 11, 1978. v. 79 (3). p. 12. ill. (NAL Call No.: 304.8 C822).

0374

Effect of carbon dioxide concentration on growth and dry matter production of crop plants. VI. Effect of oxygen concentration on the carbon dioxide-dry matter production relationship in some C3- and C4 (carbon pathway)-crop species (Rice, soybeans, Japanese millet and maize).  
Imai, K. Murata, Y. Tokyo, Nihon Sakumotsu Gakkai. Nihon Sakumotsu Gakkai kiji. Japanese journal of crop science Nihon Gakkai Sakumotsu. Mar 1979. v. 48 (1). p. 58-65. ill. 24 ref. (NAL Call No.: 22.5 C88).

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The effect of diflufenuron and fentin hydroxide on soybean seed quality (Cultivars, pesticides injury).  
Hatzios, K.K. Penner, D. East Lansing, Association of Official Seed Analysts. Journal of seed technology. 1977. v. 2 (1). p. 73-80. ill. 16 ref. (NAL Call No.: SB113.2.J6).

0376

The effect of surfactant and environment on the toxicity of metriflufen to soybeans (*Glycine max*) and johnsongrass (*Sorghum halepense*).  
McWhorter, C.G. Champaign, Ill., Weed Science Society of America. Weed science. Nov 1979. v. 27 (6). p. 675-679. ill. 11 ref. (NAL Call No.: 79.8 W41).

0377

Effects of air pollutants (carbon monoxide, nitrogen dioxide and sulphur dioxide) on seed germinability (cocklebur (*Xanthium pennsylvanicum*), pigweed (*Amaranthus retroflexus*), wild mustard (*Brassica kaber*), giant ragweed (*Ambrosia trifida*) and soybean (*Glycine max*)).

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0378

**Effects of environment on the toxicity of glyphosate to johnsongrass (*Sorghum halepense*) and soybeans (*Glycine max*).**

McWhorter, C.G. Azlin, W.R. Champaign, Ill.. Weed Science Society of America. Weed science. Nov 1978. v. 26 (6). p. 605-608. ill. 26 ref. (NAL Call No.: 79.8 W41).

0379

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0380

**The effects of temperature on *Pratylenchus scribneri* and *Pratylenchus alleni* (nematodes) populations on soybeans and tomatoes.**

Dickerson, O.J. Ames, Iowa Society of Nematologists. Journal of nematology. Jan 1979. v. 11 (1). p. 23-26. ill. 14 ref. (NAL Call No.: QL391.N4J62).

0381

**Effects of (the root-knot nematode) *Meloidogyne incognita* on nitrogen fixation in soybean.**

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0382

**The farm pesticide industry.**

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0383

**Field assessment of air pollution-induced soybean yield losses (Ozone, photochemical oxidants).**

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0384

**A field estimate of SO<sub>2</sub> (sulfur dioxide) deposition velocities to rapidly growing soybeans (Pollutant transport).**

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0385

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Cromwell, R.P. Johnson, F.A. San Francisco, California Farmer Publishing Company. Agrichemical age. Nov/Dec 1979. v. 23 (9). p. 22. ill. (NAL Call No.: 381 AG85).

0386

**Five planter meters tested for damage to soybean seed.**

Paulsen, M.R. Nave, W.R. Urbana, Agricultural Experiment Station. Illinois research. Spring 1979. v. 21 (2). p. 10-11. ill. (NAL Call No.: 100 IL64).

0387

**A general view of plant protection in the People's Republic of China with special reference to soybean pests and diseases.**

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0388

**Genetic variability for resistance to propanil (herbicide) injury in soybeans.**

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## (PROTECTION OF PLANTS)

0389

**Genotypic evaluation for iron deficiency chlorosis in soybeans by visual scores and chlorophyll concentration.**

Rodriguez de Ciano, S. Fehr, W.R. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 644-646. ill. 12 ref. (NAL Call No.: 64.8 C883).

0390

**Growth and specific nodule activity of soybean (inoculated with *Rhizobium japonicum*) during application and recovery of a leaf moisture stress.**

Patterson, R.P. Raper, C.D. Jr. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. Oct 1979. v. 64 (4). p. 551-556. ill. 16 ref. (NAL Call No.: 450 P692).

0391

**Growth inhibition of cotton (*Gossypium hirsutum*) and soybean (*Glycine max*) roots and shoots by three dinitroaniline herbicides (Phytotoxicity).**

Murray, D.S. Street, J.E. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 336-342. ill. 8 ref. (NAL Call No.: 79.8 W41).

0392

**Histological study of the compatible and incompatible interaction of soybeans and *Meloidogyne incognita*.**

Kaplan, D.T. Thomason, I.J. Ames, Iowa, Society of Nematologists. Journal of nematology. Oct 1979. v. 11 (4). p. 338-343. ill. 29 ref. (NAL Call No.: QL391.N4J62).

0393

**Improving the field production environment for soybeans (Cultivation practices, application of fertilizers, crop protection from weeds, insects and diseases).**

Lam-Sanchez, A. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Mar 1981. v. 58 (3). p. 128-130. Includes 15 ref. (NAL Call No.: 307.8 J82).

0394

**Influence of rate and source of potassium on soybean cyst nematode (*Heterodera glycines*) reproduction on soybean seedlings.**

Luedders, V.D. Shannon, J.G. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. July 1979. v. 63 (7). p. 558-560. ill. 9 ref. (NAL Call No.: 1.9 P69P).

0395

**Influence of site of uptake of fluridone (herbicide) on early development of soybean (*Glycine max*) and cotton (*Gossypium hirsutum*) (Injuries).**

Rafii, Z.E. Ashton, F.M. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 321-327. ill. 9 ref. (NAL Call No.: 79.8 W41).

0396

**The influence of temperature on *Meloidogyne incognita* (nematodes) on soybean.**

Nardacci, J.F. Barker, K.R. Ames, Iowa Society of Nematologists. Journal of nematology. Jan 1979. v. 11 (1). p. 62-70. ill. 27 ref. (NAL Call No.: QL391.N4J62).

0397

**Influence of temperature on population development of eight species of *Pratylenchus* on soybean (Nematodes).**

Acosta, N. Malek, R.B. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1979. v. 11 (3). p. 229-232. ill. 11 ref. (NAL Call No.: QL391.N4J62).

0398

**Interaction of selected insecticide-herbicide combinations on soybeans (*Glycine max*) (Injury, population stand, and grain yield).**

Hayes, R.M. Yeargan, K.V. Champaign, Ill., Weed Science Society of America. Weed science. Jan 1979. v. 27 (1). p. 51-54. ill. 17 ref. (NAL Call No.: 79.8 W41).

0399

**Interactions of *Meloidogyne incognita* and *Rotylenchulus reniformis* with selected soybean varieties (Nematodes).**

Lim, B.K. Castillo, M.B. Laguna, Kalikasan. Kalikasan. 1978. v. 7 (2). p. 165-176. ill. 11 ref. (NAL Call No.: QH301.K3).

0400

**Manganese concentration in soybean leaves as affected by cultivars and soil properties (Includes toxicity).**

Jones, W.F. Nelson, L.E. New York, Dekker. Communications in soil science and plant analysis. 1979. v. 10 (5). p. 821-830. ill. 10 ref. (NAL Call No.: S590.C63).

0401

**Monitoring soybeans for foliar diseases. Plots throughout Illinois help scientists learn about the incidence, severity, and location of diseases.**

Pataky, J.K. Lim, S.M. Urbana, The Station. Illinois research. Illinois. Agricultural Experiment Station. Summer 1979. v. 21 (3). p. 3-4. map. (NAL Call No.: 100 IL64).

0402

**More control--less pesticide (Soybean pest control).**

Harper, J.D. Backman, P.A.; Rodriguez-Kabana, R.; Williams, J.C.; Walker, R.H. Auburn, The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Fall 1980. v. 27 (3). p. 9. ill. (NAL Call No.: 100 AL1H).

0403

**Multiple defense evens the odds against nematodes (Heterodera glycines, pest of soybeans).**

Marking, S. St. Louis, Mo., American Soybean Association. Soybean digest. May/June 1979. v. 39 (7). p. 22-23. ill. (NAL Call No.: 60.38 S09).

0404

**New soybean disease discovered (Soybean cyst nematode, Heterodera glycines).**

MacDonald, D.H. St. Paul, University of Minnesota Agricultural Experiment Station. Minnesota science. Fall 1978. v. 33 (4). p. 3-4. ill. (NAL Call No.: 100 M668).

0405

**New varieties boost (soy) bean yields (Variety selection for regional climates).**

Blair, J. St. Louis, Mo., American Soybean Association. Soybean digest. May/June 1981. v. 41 (7). p. 32b. (NAL Call No.: 60.38 S09).

0406

**Observations on the relationships between a vesicular-arbuscular fungus (Glomus sp.), a fungivorous nematode (Aphelenchus avenae), and the growth of soybeans.**

Salawu, E.O. Estey, R.H. Saint-Hyacinthe, Quebec, Quebec Society for the Protection of Plants. Phytoprotection. June 1979. v. 60 (2). p. 99-102. ill. 9 ref. (NAL Call No.: 464.8 P566).

0407

**Occurrence and distribution of the soybean cyst nematode (Heterodera glycines) in Alabama.**

Gray, F.A. Rodriguez-Kabana, R. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Apr 1979. v. 63 (4). p. 267-270. ill., map. 9 ref. (NAL Call No.: 1.9 P69P).

0408

**Ozone and sulfur dioxide effects on reproduction and host-parasite relationships of selected plant-parasitic nematodes (Air pollutants, Soybeans, Begonia).**

Weber, D.E. Reinert, R.A. St. Paul, American Phytopathological Society. Phytopathology. June 1979. v. 69 (6). p. 624-628. ill. 24 ref. (NAL Call No.: 464.8 P56).

0409

**Pest (insects, diseases, weeds) control in soybeans--1979.**

Doersch, R.E. Doll, J.D. Madison, Wis., The Programs. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. Wisconsin. University. Cooperative Extension Programs. Jan 1979. Jan 1979. (A2782). 23 p. ill. (NAL Call No.: S544.3.W6W53).

0410

**Pesticide interactions in soybeans.**

Schmitt, D.P. Corbin, F.T.; Bradley, J.R. Jr.; Van Duyn, J.W. San Francisco, California Farmer. Agrichemical age. Jan 1981. v. 25 (1). p. 54-55. ill. (NAL Call No.: 381 AG85).

0411

**Photosynthetic response of field-grown soybeans to fumigations with sulphur dioxide.**

Muller, R.N. Miller, J.E. Oxford, Blackwell Scientific Publications. The Journal of applied ecology. Aug 1979. v. 16 (2). p. 567-576. ill. Bibliography p. 575-576. (NAL Call No.: 410 J828).

0412

**Physiological responses of soybean (Glycine max) plants to metribuzin (Photosynthesis inhibitors, sublethal effects, nitrogen metabolism).**

Fedtko, C. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1979. v. 27 (2). p. 192-195. ill. 29 ref. (NAL Call No.: 79.8 W41).

## (PROTECTION OF PLANTS)

0413

**Picloram (herbicide) translocation and redistribution in soybean plants following root uptake.**

Gaudiel, R. Born, W.H. vanden. New York, Academic Press. Pesticide biochemistry and physiology. July 1979. v. 11 (1/3). p. 129-134. ill. 17 ref. (NAL Call No.: SB951.P49).

0414

**Polychlorinated biphenyls: phytotoxicity, absorption and translocation by plants, and inactivation by activated carbon (Effects on soybeans and fescue).**

Weber, J.B. Mrozek, E. Jr. New York, Springer Verlag. Bulletin of environmental contamination and toxicology. Oct 1979. v. 23 (3). p. 412-417. ill. 15 ref. (NAL Call No.: RA1270.P35A1).

0415

**Prevention of monocarpic senescence in soybeans with auxin and cytokinin: an antidote for self-destruction.**

Nooden, L.D. Kahanak, G.M. Washington, D.C., American Association for the Advancement of Science. Science. Nov 16, 1979. v. 206 (4420). p. 841-843. ill. 21 ref. (NAL Call No.: 470 SCI2).

0416

**Private eyes detect yield robbers (of soybeans, insect and diseases).**

Marking, S. Abbott, S. St. Louis, Mo., American Soybean Association. Soybean digest. May/June 1979. v. 39 (7). p. 16-f-16-g. ill. (NAL Call No.: 60.38 S09).

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**A rapid technique for screening soybeans for reniform nematode resistance (Rotylenchulus reniformis).**

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0418

**Relative tolerance of selected soybean cultivars to *Hoplolaimus columbus* (nematodes) and possible effects of soil temperature.**

Nyczepir, A.P. Lewis, S.A. Ames, Iowa Society of Nematologists. Journal of nematology. Jan 1979. v. 11 (1). p. 27-31. ill. 11 ref. (NAL Call No.: QL391.N4J62).

0419

**Residence time of sulphite in SO<sub>2</sub> (sulfur dioxide) 'sensitive' and 'tolerant' soybean cultivars (Injuries, toxicity caused by pollutants).**

Miller, J.E. Xerikos, P.B. Essex, Applied Science. Environmental pollution. Apr 1979. v. 18 (4). p. 259-264. ill. 19 ref. (NAL Call No.: TD172.E52).

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**Respiratory changes with chilling injury of soybeans.**

Leopold, A.C. Musgrave, M.E. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. Nov 1979. v. 64 (5). p. 702-705. ill. 13 ref. (NAL Call No.: 450 P692).

0421

**Response of soybean plants to metribuzin and interaction with atrazine residues (Herbicides, Phytotoxicity).**

Marriage, P.B. Hamill, A.S. New York, Marcel Dekker. Journal of environmental science and health. Part B: Pesticides, food contaminants, and agricultural wastes. 1978. v. B13 (3). p. 287-297. ill. 17 ref. (NAL Call No.: TD172.J61).

0422

**Response of soybeans to high temperature during germination (Includes cultivars, seed quality).**

Emerson, B.N. Minor, H.C. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1979. v. 19 (4). p. 553-556. ill. 15 ref. (NAL Call No.: 64.8 C883).

0423

**Role of roots and shoots of soybean (cultivars) in tolerance to excess soil zinc (Phytotoxicity).**

White, M.C. Chaney, R.L. Madison, Crop Science Society of America. Crop science. Jan/Feb 1979. v. 19 (1). p. 126-128. ill. 18 ref. (NAL Call No.: 64.8 C883).

0424

**Selection for aluminum tolerance in soybeans based on seedling-root growth (Toxicity).**

Hanson, W.D. Kamprath, E.J. Madison. Agronomy journal American Society of Agronomy. July/Aug 1979. v. 71 (4). p. 581-586. ill. 16 ref. (NAL Call No.: 4 AM34P).

0425

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0426

**Soybean cyst nematode (*Heterodera glycines*).**

Nyvall, R. Norton, D.C. Ames. PmIowa State University of Science and Technology, Ames. Cooperative Extension Service. Apr 1979. Apr 1979. (879). 2 p. ill. (NAL Call No.: 275.29 I09PA).

0427

**The soybean cyst nematode (*Heterodera glycines*): a growing problem for Midwest soybean producers.**

Benz, C. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Dec 1979. v. 32 (3). p. 17-19. ill. (NAL Call No.: 6 W55).

0428

**The soybean cyst nematode (*Heterodera glycines*): a new threat to Alabama soybeans.**

Gray, F.A. Rodriguez-Kabana, R. Auburn, Agricultural Experiment Station of Auburn University. Highlights of agricultural research. Spring 1979. v. 26 (1). p. 17. ill., map. (NAL Call No.: 100 AL1H).

0429

**Soybean diseases.**

Arnett, J.D. Jr. Athens. Leaflet Georgia. University. Cooperative Extension Service. Apr 1979. Apr 1979. (71). 10 p. ill. (NAL Call No.: 275.29 G29L).

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**Soybean diseases.**

Willis, W. Schwenk, F. Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. May 1978. May 1978. (449). p. 16-17. ill. (NAL Call No.: 275.29 K13EX).

0431

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McDaniel, M.C. Walters, H.U. Little Rock, Ark., The Service. EL.Arkansas. University. Cooperative Extension Service. Apr 1979. Apr 1979. (292). 12 p. ill. (NAL Call No.: 275.29 AR4LE).

0432

**Soybean diseases atlas.**

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0433

**Soybean (*Glycine max*) and grain sorghum (*Sorghum bicolor*) tolerance to residues of tetrafluron and fluometuron.**

Reasons, D.L. Jeffery, L.S. Champaign, Ill., Weed Science Society of America. Weed science. Nov 1978. v. 26 (6). p. 553-538. ill. 3 ref. (NAL Call No.: 79.8 W41).

0434

**Soybean (*Glycine max*) cultivar response to metribuzin in solution culture (Phytotoxicity).**

Hardcastle, W.S. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 278-279. ill. 20 ref. (NAL Call No.: 79.8 W41).

0435

**Soybean handbook (Includes culture, pests and diseases, processing, cost and return planning).**

Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. May 1978. May 1978. (449). 24 p. ill. (NAL Call No.: 275.29 K13EX).

0436

**Soybean pest management.**

Athow, K.L. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Mar 1981. v. 58 (3). p. 130-135. ill. 15 ref. (NAL Call No.: 307.8 J82).

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0437

**Soybean pest management (Insects, weeds, diseases, nematodes, in the U.S.).**  
Pedigo, L.P. Higgins, R.A.; Hammond, R.B.; Bechinski, E.J. Boca Raton, Fla., CRC Press. CRC handbook of pest management in agriculture. 1981. Literature review. v. 3. p. 417-537. ill., map. 400 ref. (NAL Call No.: SB950.C7).

0438

**Soybean response to selected rice herbicides (Leaf injury, yield reduction).**  
Eastin, E.F. Madison, Crop Science Society of America. Crop science. Nov/Dec 1978. v. 18 (6). p. 967-968. ill. 3 ref. (NAL Call No.: 64.8 C883).

0439

**Soybean seed quality (damage) as affected by planter meters.**  
Nave, W.R. Paulsen, M.R. St. Joseph, Mich., The Society. Transactions of the ASAE American Society of Agricultural Engineers. July/Aug 1979. v. 22 (4). p. 739-745. ill. 9 ref. (NAL Call No.: 290.9 AM32T).

0440

**Soybean stand establishment and yield as affected by herbicides and cultural practices.**  
Johnson, R.R. Wax, L.M. Madison, The Society. Agronomy journal. American Society of Agronomy. Sept/Oct 1979. v. 71 (5). p. 880-884. ill. 11 ref. (NAL Call No.: 4 AM34P).

0441

**Soybean yield, leaf manganese, and soil manganese as affected by sources and rates of manganese and soil pH (hydrogen-ion concentration, nutritional deficiencies).**  
Shuman, L.M. Boswell, F.C. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1979. v. 71 (6). p. 989-991. ill. 15 ref. (NAL Call No.: 4 AM34P).

0442

**Susceptibility of soybean cultivars to *Pratylenchus scribneri* (Nematodes).**  
Acosta, N. Malek, R.B. Rio Piedras. Journal of agriculture of the University of Puerto Rico. Apr 1979. v. 63 (2). p. 103-110. ill. 5 ref. (NAL Call No.: 8 P832J).

0443

**Tillage systems for Illinois (Includes pest and disease control for maize, soybeans, wheat).**  
Siemens, J.C. Shurtleff, M.C. Urbana, Ill., The Service. Circular. Illinois. University. Cooperative Extension Service. June 1979. June 1979. (1172). 22 p. ill. 1 ref. (NAL Call No.: 275.29 IL62C).

0444

**Tiny pest (*Heterodera glycines*, soybeans) carries clout.**  
Mangold, G. St. Louis, American Soybean Association. Soybean digest. Feb 1979. v. 39 (4). p. 30. ill. (NAL Call No.: 60.38 S09).

0445

**The ultrastructure and distribution of an intracellular bacterium-like microorganism in tissues of larvae of the soybean cyst nematode, *Heterodera glycines*.**  
Endo, B.Y. New York, Academic Press. Journal of ultrastructure research. Apr 1979. v. 67 (1). p. 1-4. ill. 22 ref. (NAL Call No.: 440.8 J822).

0446

**Uptake and transformation of <sup>14</sup>C (carbon isotope) N-nitroso-di-N-propylamine (herbicide) by soybean plants.**  
Berard, D.F. Rainey, D.P. New York, Springer. Bulletin of environmental contamination and toxicology. Sept 1979. v. 23 (1/2). p. 136-140. ill. 3 ref. (NAL Call No.: RA1270.P35A1).

0447

**Use of planting time application of ethylene dibromide for control of plant parasitic nematodes (*Meloidogyne arenaria*, *Heterodera glycines*, *Meloidogyne hapla*) on soybeans: new uses for an old fumigant.**  
Rodriguez-Kabana, R. King, P.S. Auburn, Agricultural Experiment Station of Auburn University. Highlights of agricultural research. Spring 1979. v. 26 (1). p. 18-19. (NAL Call No.: 100 AL1H).

0448

**Use of the recirculating sprayer to control tall weed escapes in crops (*Asclepius syriaca*, soybeans).**  
Carlson, D.R. Burnside, O.C. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1981. v. 29 (2). p. 174-179. ill. 11 ref. (NAL Call No.: 79.8 W41).

0448

Variable responses of soybeans to mixtures of  
ozone and sulfure dioxide (Foliar injury).

Heagle, A.S. Johnston, J.W. Pittsburgh.  
JournalAir Pollution Control Association. July  
1979. v. 29 (7). p. 729-732. ill. 14 ref. (NAL  
Call No.: 449.9 AI7).

# PESTS OF PLANTS – GENERAL AND MISC.

0450

**Breeding for soybean pest resistance.**

Nickell, C.D. ISSODB. Urbana : International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 73. (NAL Call No.: TX558.S715).

0456

**Soybean diseases and insects.**

(Kentucky) University of Kentucky, Cooperative Extension Service 1982. Pesticide Applicator Training collection. 80 slides : col. + 2 sound cassettes (31 min.) + 1 script. (NAL Call No.: Slide no.18).

0451

**Current status of plant protection for soybeans in the United States.**

Newsom, L.D. ISSODB. Urbana : International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 40-51. Includes references. (NAL Call No.: TX558.S715).

0452

**Evaluation of alternative pest control technologies for grain crops and soybeans /**

**J.C. Headley, C.R. Taylor and Bjorn Sundell.**  
Headley, J. C. Taylor, C. R.; Sundell, Bjorn. (S.l. s.n. 1978?). 10 p. ; 28 cm. Bibliography: p. (11). (NAL Call No.: SB951.H422).

0453

**Integrated pest management : decision guide.**

DeWitt, Jerry. Taylor, S. Elwynn.; Herman, J. Clayton. 1981. This publication is a guide to identify insects and diseases that affect corn, alfalfa, and soybeans. Weed identification is also included. Document available from: Iowa State Univ., Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011. 147 p. : ill. (NAL Call No.: Not available at NAL.). (NAL Call No.: IPM-22).

0454

**An overview of the epidemiology of selected fungal, nematode, and seedborne pathogens of soybeans.**

Ford, R.E. ISSODB. Urbana : International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 167-168. (NAL Call No.: TX558.S715).

0455

**Pesticide applicator certification.**

(United States? s.n.) 1982. Pesticide Applicator Training Collection ~Title from container ~Beta format. 4 videocassettes (ca. 60 min. each) : sd., col. ; 1/2 in. (NAL Call No.: Videocassette no.5).

# PESTS OF PLANTS - INSECTS

0457

**Activity of trypsin and chymotrypsin inhibitors of soybean forms with different resistance to soybean borer (Soybean varieties).**

Sichkar, V.I. Levitsky, A.P.; Grikun, O.A.; Lobko, V.N.; Marj'ushkin, V.F. Ames : The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1983. v. 10. p. 123-125. Includes references. (NAL Call No.: aSB205.S7S6).

0458

**Adult seedcorn maggots in soybeans relay intercropped into winter wheat (*Delia platura*, *Glycine max*, *Triticum aestivum*).**

Hammond, R.B. EVETB. Jeffers, D.L. College Park : Entomological Society of America. Environmental entomology. Oct 1983. v. 12 (5). p. 1487-1489. Includes references. (NAL Call No.: QL461.E532).

0459

**Alfalfa hoppers feast on soybeans.**

St. Louis, Mo., American Soybean Association. Soybean digest. Nov 1980. v 41 (1). p. 19S. ill. (NAL Call No.: 60.38 S09).

0460

**Application of a baculovirus of *Pseudoplusia includens* to soybean: efficacy and seasonal persistence (Biological control).**

McLeod, P.U. Young, S.Y.; Yearian, W.C. College Park, Md., Entomological Society of America. Environmental entomology. Apr 15, 1982. v. 11 (2). p. 412-416. ill. Includes 11 ref. (NAL Call No.: QL461.E532).

0461

**Application of a simulative approach to evaluating alternative methods for the control of agricultural pests.**

Reichelderfer, K.H. Bender, F.E. Lexington, Ky., American Agricultural Economics Association. Extract: A microanalytic simulation model of the interrelationships among Mexican bean beetle pest populations, populations of wasps that are parasites of the pest, chemical control inputs, and soybean yield is presented. Points from output response surfaces obtained through simulations of alternative biological and chemical pest control strategies are utilized in conjunction with cost data to construct benefit-cost ratios for each intraseasonal control option studied. Comparison of ratios indicates that biological of the pest is, by benefit-cost criteria and from both private and social perspectives, a competitive alternative to chemical control. American journal of agricultural economics. May 1979. v. 61 (2). p. 258-267. 19 ref. (NAL Call No.: 280.8 J822).

0464

**Arthropod predators on cotton, corn, tobacco, and soybeans in South Carolina.**

Roach, S.H. AR-SO. Athens, Ga., The Society. Journal - Georgia Entomological Society. Georgia Entomological Society. Apr 1980. v. 15 (2). p. 131-138. ill. 8 ref. (NAL Call No.: QL461.G4).

0465

**Assessment of the role of natural enemies in regulation of soybean pest populations (Arthropod predators, parasites and entomopathogens, United States).**

Pedigo, L.P. SCSBA. Pitre, H.N.; Whitcomb, W.H.; Young, S.Y. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. June 1983. Regional Research Project S-74. June 1983. (285). p. 39-48. Includes references. (NAL Call No.: 100 G29S0).

0466

***Autographa precationis* in relation to soybean: life history, and food intake and utilization under controlled conditions.**

Khalsa, M.S. Kogan, M. College Park, Md., Entomological Society of America. Environmental entomology. Feb 15, 1979. v. 8 (1). p. 117-122. ill. 16 ref. (NAL Call No.: QL461.E532).

0467

**Bean leaf beetle (*Cerotoma trifurcata*): diurnal population fluctuations (during 1976 and 1977 in soybean fields in Washington County, North Carolina).**

Boiteau, G. Bradley, J.R. Jr. College Park, Md., Entomological Society of America. Environmental entomology. Aug 1979. v. 8 (4). p. 615-618. ill. 6 ref. (NAL Call No.: QL461.E532).

0468

**Bean leaf beetle (*Cerotoma trifurcata*): flight and dispersal behavior (Soybeans, maize).**

Boiteau, G. Bradley, J.R. Jr. College Park, Md. Annals Entomological Society of America. Mar 15, 1979. v. 72 (2). p. 298-302. ill. 10 ref. (NAL Call No.: 420 EN82).

0469

**Bean leaf beetle (*Cerotoma trifurcata*): Micro-spatial patterns and sequential sampling of (soybean) field populations (in Washington County, North Carolina).**

Boiteau, G. Bradley, J.R. Jr.; Van Duyn, J.W.; Stinner, R.E. College Park, Md., Entomological Society of America. Environmental entomology. Dec 1979. v. 8 (6). p. 1139-1144. ill. 26 ref.

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AR42F).

0470

**Bean leaf beetle (*Cerotoma trifurcata*): some seasonal anatomical changes and dormancy (Soybean fields, in North Carolina).**

Boiteau, G. Bradley, J.R. Jr. College Park, Md. Annals Entomological Society of America. Mar 15, 1979. v. 72 (2). p. 303-307. ill. 15 ref. (NAL Call No.: 420 EN82).

0471

**Bean leaf beetle control with systemic insecticide-nematicides, 1980 (*Cerotoma trifurcata*, soybean).**

Lentz, G.L. Hayes, R.W.; Chambers, A.Y. College Park : Entomological Society of America. Insecticide and acaricide tests. 1982. v. 7. p. 185-186. (NAL Call No.: SB950.A1I49).

0472

**Bean pod mottle disease in soybeans in Mississippi (*Cerotoma trifurcata*, vector).**

Pitre, H.N. MS. Mississippi State, The Station. Research report - Mississippi Agricultural & Forestry Experiment Station. July 1980. v. 5 (12). 4 p. ill., map. 8 ref. (NAL Call No.: S79.E37).

0473

**Bean pod mottle (virus) disease in soybeans (*Cerotoma trifurcata*, vectors).**

Pitre, H.N. MS. Mississippi State, The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Sept 1980. v. 43 (9). p. 1-3. ill., map. (NAL Call No.: 100 M69MI).

0474

**Bioactivity of the postemergent herbicides acifluorfen and bentazon on *Geocoris punctipes* (Say) (Hemiptera: Lygaeidae) (*Glycine max*).**

Farlow, R.A. Pitre, H.N. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1983. v. 76 (1). p. 200-203. Includes references. (NAL Call No.: 421 J822).

0475

**Biological control of green clover worm (*Plathypena scabra*) on soybean (with *Anticarsia gemmatilis*).**

Mueller, A.J. Kunnalaca, S. Fayetteville, The Station. Arkansas farm research. Arkansas. Agricultural Experiment Station. Sept/Oct 1979. v. 28 (5). p. 8. ill. (NAL Call No.: 100

0476

**The biology and ecology of *Nomuraea rileyi* and a program for predicting its incidence on *Anticarsia gemmatilis* in soybean.**

Kish, Leslie P. Gainesville Agricultural Experiment Stations, Institute of Food and Agricultural Sciences, University of Florida 1978. v. 48 p. : ill. -. Bibliography: p. 47-48. (NAL Call No.: 100 F66S (1) No.795).

0477

**Biology and pest potential of *Anavitrinella pampinaria* (Lepidoptera: Geometridae) in soybeans.**

Marston, N.L. JEENAI. Davis, D.G.; Garcia, C.; Gebhardt, M.R. College Park : Entomological Society of America. Journal of economic entomology. Dec 1983. v. 76 (6). p. 1248-1254. ill. Includes references. (NAL Call No.: 421 J822).

0478

**Biology of *Microplitis demolitor* (Hymenoptera: Braconidae), an imported parasitoid of *Heliothis* (Lepidoptera: Noctuidae) spp. and the soybean looper, *Pseudoplusia includens* (Lepidoptera: Noctuidae).**

Shepard, M. EVETB. Powell, J.E.; Jones, W.A. Jr. College Park : Entomological Society of America. Environmental entomology. June 1983. v. 12 (3). p. 641-645. ill. Includes references. (NAL Call No.: QL461.E532).

0479

**Biology of the soybean looper, *Pseudoplusia includens*: characterization of last-stage larvae (Louisiana, USA).**

Shour, M.H. Sparks, T.C. College Park, Md., The Society. Annals of the Entomological Society of America. Nov 1981. v. 74 (6). p. 531-535. ill. 18 ref. (NAL Call No.: 420 EN82).

0480

**Bollworm on soybean (*Heliothis*).**

Mueller, A.J. Engroff, B.W. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Jan/Feb 1981. v. 30 (1). p. 9. ill. (NAL Call No.: 100 AR42F).

0481

Calibration ratios for sampling soybean Lepidoptera (*Heliothis zea*, *Pseudoplusia includens*, *Anticarsia gemmatilis*): effect of larval species, larval size, plant growth stage and individual sampler.

Marston, N.L. Dickerson, W.A. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 110-114. ill. 14 ref. (NAL Call No.: 421 J822).

0482

Carabid beetles in soybean agroecosystems (*Harpalus pensylvanicus*).

House, G.J. All, J.N. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1981. v. 10 (2). p. 194-196. ill. 11 ref. (NAL Call No.: QL461.E532).

0483

Characteristics and distribution of itchgrass in Louisiana (*Rottboellia exaltata*, sugarcane, soybeans).

White, J.C. Rhodes, D.G.; Walker, H.L. New Orleans, The Region. Agricultural reviews and manuals. ARM-S - United States, Dept. of Agriculture, Science and Education Administration, Agricultural Research, Southern Region. Nov 1979. Nov 1979. (7). 6 p. ill. 7 ref. (NAL Call No.: aS21.A75U65).

0484

Chemically mediated reproductive isolation between cabbage looper and soybean looper moths (Lepidoptera: Noctuidae) (*Trichoplusia ni*, *Pseudoplusia includens*).

Leppla, N.C. EVETB. College Park : Entomological Society of America. Environmental entomology. Dec 1983. v. 12 (6). p. 1760-1765. ill. Includes references. (NAL Call No.: QL461.E532).

0485

Citrus pulp bait insecticide formulations for control of velvetbean caterpillar and bean leaf beetle on soybean (*Anticarsia gemmatilis*, *Cerotoma trifurcata*).

Harper, J.D. Gainesville, Florida Entomological Society. Florida entomologist. Dec 1981. v. 64 (4). p. 538-540. (NAL Call No.: 420 F662).

0486

Common soybean insects / Iowa State University. Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1976. This publication describes and illustrates fifteen common soybean insects. 1 sheet : ill. (NAL Call No.: Document available from source.). (NAL Call No.: PM 463-6).

0487

Comparative consumption rates for selected insect predators of two defoliating caterpillar species of soybean in Louisiana (*Lebia analis*, *Calosoma alternans sayi*, biological control of *Pseudoplusia includens*, *Heliothis zea*, soybean looper, corn earworm).

Brown, D.W. Goyer, R.A. Athens, Ga. : The Society. Journal of the Georgia Entomological Society. July 1984. v. 19 (3). p. 299-303. Includes 7 references. (NAL Call No.: QL461.G4).

0490

Comparative resistance of multiple insect-resistant soybean genotypes to the soybean looper (*Pseudoplusia includens*, *Epilachna*, *Cerotoma trifurcata*, *Heliothis*).

Smith, C.M. Gilman, D.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 1981. v. 74 (4). p. 400-403. ill. 15 ref. (NAL Call No.: 421 J822).

0491

Consumption and development of velvetbean caterpillar as influenced by soybean phenology (*Anticarsia gemmatilis*, southeastern USA).

Moscardi, F. Barfield, C.S.; Allen, G.E. College Park, Md., Entomological Society of America. Environmental entomology. Dec 1981. v. 10 (6). p. 880-884. ill. Includes 1 p. ref. (NAL Call No.: QL461.E532).

0492

Continuous beans don't have to mean continuous problems (Control of insects and diseases in soybeans).

Shumate, J. St. Louis, Mo., American Soybean Association. Soybean digest. May/June 1979. v. 39 (7). p. 16-b. ill. (NAL Call No.: 60.38 S09).

## (PESTS OF PLANTS - INSECTS)

0493

**Control insects in soybeans (Includes mites).**  
Adams, D.B. Horton, D.L.; Todd, J.W. Athens, Ga. : The Service. Circular - Cooperative Extension Service, University of Georgia. Feb 1984. Feb 1984. (720,rev.). 12 p. (NAL Call No.: 275.29 G29C).

0494

**Control insects on soybeans (Damage to roots, stems, foliage and bloom feeders, pod feeders, Arkansas).**  
Jones, B.F. Little Rock, Ark., The Service. EL - Cooperative Extension Service, University of Arkansas. Sept 1981. Sept 1981. (193). 8 p. ill. (NAL Call No.: 275.29 AR4LE).

0495

**Control of yellow mosaic of soybean by systemic insecticides, 1976-78 (Soybean (Glycine max 'Bragg'), mung bean yellow mosaic, MYMV, whitefly; Bemisia tabaci Genn. (Vector)).**  
Dhingra, K.L. Chenulu, V.V. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1982. v. 37. p. 103. (NAL Call No.: 464.9 AM31R).

0496

**Cooperation in soybean entomology.**  
Kogan, M. ISSODB. Urbana : International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 180-183. (NAL Call No.: TX558.S715).

0497

**Corn earworm and green cloverworm control on soybeans in Alabama (Heliothis zea, Plathypena scabra).**  
Rohlf, W.M. Mack, T.P. College Park : Entomological Society of America. Insecticide and acaricide tests. 1982. v. 7. p. 190. (NAL Call No.: SB950.A1I49).

0498

**Correlation of the red imported fire ant (Hymenoptera: Formicidae) with reduced soybean yields in North Carolina (Solenopsis invicta).**  
Apperson, C.S. JEENA. Powell, E.E. College Park : Entomological Society of America. Journal of economic entomology. Apr 1983. v. 76 (2). p. 259-263. Includes references. (NAL Call No.: 421 J822).

0499

**Crop rotation vs. monoculture. I. Insect control (Pests of maize, cotton, rice, soybeans, sorghum).**  
Barnes, G. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Jan 1980. v. 32 (4). p. 15-17. ill. (NAL Call No.: 6 W55).

0500

**Damage to soybean seeds and seedlings by larvae of the flea beetle Systema frontalis (Coleoptera: Chrysomelidae).**  
Riley, T.J. GENSA. Athens : The Society. Journal of the Georgia Entomological Society. July 1983. v. 18 (3). p. 291-293. ill. (NAL Call No.: QL461.G4).

0501

**Determination of yield-loss relationships for two soybean defoliators by using simulated insect-defoliation techniques (Cynthia cardui, Plathypena scabra, Iowa).**  
Hammond, R.B. Pedigo, L.P. College Park, Md., Entomological Society of America. Journal of economic entomology. Feb 1982. v. 75 (1). p. 102-107. 2 p. ref. (NAL Call No.: 421 J822).

0502

**Development, fecundity, and longevity of the tobacco budworm (Lepidoptera: Noctuidae) fed soybean, cotton, and artificial diet at three temperatures (Heliothis virescens).**  
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0503

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**Dispersion and sequential sampling of green cloverworm eggs in soybeans (*Plathypena scabra*).**

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0510

**Dispersion and spread of the entomopathogenic fungus *Nomuraea rileyi* (Moniliales:Moniliaceae) in a soybean field (*Plathypena scabra*, *Pseudoplusia includens*, *Anticarsia gemmatilis*).**  
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**Distribution of bean leaf beetle (*Cerotoma trifurcata*) eggs, larvae, and pupae in relation to soybean plants: Determination by emergence cages and soil sampling techniques.**

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0513

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0517

**Ecological impact of parathion in soybeans. I. Vegetative fauna. (Predatory arthropods, detrimental effects, insecticides, *Plathypena scabra*, natural control, Missouri field experiments).**  
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0521

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0522

**Effect of a resistant soybean genotype on the development of the soybean looper (Lepidoptera: Noctuidae) and an introduced parasitoid, *Microplitis demolitor* Wilkinson (Hymenoptera: Braconidae) (*Pseudoplusia includens*).**  
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0523

**Effect of benomyl on an *Entomophthora epizootic* in a *Pseudoplusia includens* population (Soybean looper, natural control, southern Arkansas).**  
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0529

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**Effects of actual and simulated seedcorn maggot (*Diptera: Anthomyiidae*) damage on soybean growth and yield.**

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0531

**Effects of air pollution on plant-insect interactions: increased susceptibility of greenhouse-grown soybeans to the Mexican bean beetle after plant exposure to SO<sub>2</sub> (Sulfur dioxide, *Epilachna varivestis*).**

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**Effects of beet armyworm (*Lepidoptera: Noctuidae*) infestation levels on soybean (*Spodoptera exiqua*).**

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**Effects of carbofuran and water stress on growth of soybean plants and twospotted spider mite (*Acari: Tetranychidae*) populations under greenhouse conditions (*Tetranychus urticae*).**

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0537

**Effects of diflubenzuron on food consumption by the soybean looper (*Pseudoplusia includens*).**

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0538

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0542

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0543

**Effects of main-stem girdling of early vegetative stages of soybean plants by three-cornered alfalfa hoppers (Homoptera: Membracidae) (*Spissitilus festinus*).**

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0544

**Effects of micrometeorological conditions on survival and fecundity of the Mexican bean beetle (*Epilachna varivestis*) in soybean fields.**

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0545

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0546

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0548

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0549

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0550

**The effects of three cultural variables on the incidence of *Nomuraea rileyi*, phytophagous Lepidoptera, and their predators on soybeans (in North Carolina).**  
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0551

**Effects of tobacco budworm (Lepidoptera: Noctuidae) infestations on pod damage and yield loss in soybean (*Heliothis virescens*).**  
McWilliams, J.M. College Park, Md. : Entomological Society of America. Journal of economic entomology. Apr 1984. v. 77 (2). p. 364-369. Includes references. (NAL Call No.: 421 J822).

0554

**Effects of *Vairimorpha necatrix* in sprays and corn meal on *Heliothis* species in tobacco, soybeans, and sorghum (Biological control).**  
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0555

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0556

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0557

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0558

**Efficacy of three predaceous insect species in controlling the soybean podworm, *Heliothis zea* (Boddie) / by Robert M. Barry.**  
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0559

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0560

**Estimating rates of arthropod predation on velvetbean caterpillar larvae in soybeans (*Anticarsia gemmatilis*).**  
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0562

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0563

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0564

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0565

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0566

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0570

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0571

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0572

**Fecal elimination of diflubenzuron by the soybean looper (*Pseudoplusia includens*).**  
 Reed, T. Bass, M.H. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Jan 1981. v. 16 (1). p. 91-95. ill. 3 ref. (NAL Call No.: QL461.G4).

0573

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 McAvoy, T.J. Smith, J.C. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1979. v. 72 (6). p. 835-836. ill. 6 ref. (NAL Call No.: 421 J822).

0574

**Feeding behavior of Mexican bean beetle (*Epilachna varivestis*) on leaf extracts of resistant and susceptible soybean genotypes.**  
 Smith, C.M. Wilson, R.F. College Park, Md., Entomological Society of America. Journal of economic entomology. June 1979. v. 72 (3). p. 374-377. ill. 13 ref. (NAL Call No.: 421 J822).

0575

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 Smith, C.M. Brim, C.A. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 78-80. ill. 6 ref. (NAL Call No.: 421 J822).

0576

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0577

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0578

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0581

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0583

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0584

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0585

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0586

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0587

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0588

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0589

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0590

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0591

**Identification of multiple insect resistant soybean lines.** Hatchett, J.H. Beland, G.L. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1979. v. 19 (4). p. 557-559. ill. 8 ref. (NAL Call No.: 64.8 C883).

0592

**Identification of predaceous arthropods (Heliothis spp., Pseudoplusia includens and Anticarsia gennatalis) in soybeans by using autoradiography.** McCarty, M.T. Shepard, M.; Turnipseed, S.G. College Park, Md., Entomological Society of America. Environmental entomology. Apr 15, 1980. v. 9 (2). p. 199-203. ill. Bibliography p. 203. (NAL Call No.: QL461.E532).

0593

**Identification of sources of resistance to limabean podborer (Lepidoptera: Tyrallidae) in soybean (*Etiella zinckenella*, *Glycine max*).**  
Talekar, N.S. Chen, B.S. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1983. v. 76 (1). p. 38-39. Includes references. (NAL Call No.: 421 J822).

0594

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0595

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0596

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0597

**Incidence of arthropod predators in different soybean cropping systems (*Nabis* spp., *Geocoris* spp., *Orius* spp., beneficial insects, Virginia).**  
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0598

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0599

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0600

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0601

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0602

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0603

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Zhang, Z.U.ISSODB. Fu, C.Q. Urbana : International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 74-79. Includes references. (NAL Call No.: TX558.S715).

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Tanzy, K. St. Louis, Mo., American Soybean Association. Soybean digest. Feb 1980. v. 40 (4). p. 39. ill. (NAL Call No.: 60.38 S09).

0605

### **Insect population dynamics in relation to soybean narrow and broad leaf isolines (Soybean varieties).**

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0606

### **Insect problems increase in Ohio soybean fields (*Popillia japonica*, *Plathypena scabra*, *Epilachna varivestis*, *Cerotoma trifurcata*).**

Hammond, R.B. Wooster, The Center. Ohio report on research and development in agriculture, home economics, and natural resources - Ohio Agricultural Research and Development Center. July/Aug 1982. v. 67 (4). p. 63-65. ill. (NAL Call No.: 100 OH3S (3)).

0607

### **Insect resistance factor in soybean PI's 229358 and 227687 demonstrated by grafting (*Glycine max*, plant introduction, *Lepidoptera*, *Noctuidae*, *Heliothis zea*).**

Lambert, L. Kilen, T.C. Madison : Crop Science Society of America. Crop science. Jan/Feb 1984. v. 24 (1). p. 163-165. Includes references. (NAL Call No.: 64.8 C883).

0608

### **Insecticide evaluation on soybeans (a preliminary report).**

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### **Insecticide recommendations for soybeans--1983 (Insect pest control, Kentucky).**

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0610

### **Insects that attack soybean seeds and seedlings / Ohio State University, Cooperative Extension Service.**

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0611

### **Investigations concerning host plant resistance to the Mexican bean beetle, *Epilachna varivestis* mulsant, in soybeans, *Glycine max* (L.) Merrill / by John Wey Van Duyn.**

Van Duyn, John Wey, 1942. 1971. Thesis (Ph.D)--Clemson University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1972. xiv, 210 leaves ; 21 cm. Bibliography: leaves 173-183. (NAL Call No.: DISS 72-5,027).

0612

### **Isolation and beetle transmission of cowpea mosaic virus (severe subgroup) from *Desmodium canescens* and soybeans in Illinois (Insect vectors).**

McLaughlin, M.R. Thongmeearkom, P. Beltsville, Md., Plant Science Research Division, Agricultural Research Service, U.S. Dept. of Agriculture. Plant disease reporter. Dec 1978. v. 62 (12). p. 1069-1073. ill. 16 ref. (NAL Call No.: 1.9 P69P).

0613

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0614

### **Laboratory and field evaluation of a nuclear polyhedrosis virus of the soybean looper, *Pseudoplusia includens* (Biological control).**

Livingston, J.M. McLeod, P.J.; Yearian, W.C.; Young, S.Y. III. Athens, Ga., The Society. Journal - Georgia Entomological Society. Georgia Entomological Society. Apr 1980. v. 15 (2). p. 194-199. 9 ref. (NAL Call No.: QL461.G4).

0615

**A laboratory antifeedant simulation bioassay for phytophagous insects (Green cloverworm larvae, *Plathypena scabra*, soybeans).**

Higgins, R.A. Pedigo, L.P. College Park, Entomological Society of America. Journal of economic entomology. Apr 15, 1979. v. 72 (2). p. 238-244. ill. 10 ref. (NAL Call No.: 421 J822).

0616

**A laboratory study of *Apanteles marginiventris*, a parasite of green cloverworm (*Plathypena scabra* on soybean in Arkansas).**

Kunnalaca, S. Mueller, A.J. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1979. v. 8 (2). p. 365-368. ill. 2 ref. (NAL Call No.: QL461.E532).

0617

**Lack of effect of pre-release acclimation on the response of soybean loopers (*Pseudoplusia includens*) (*Lepidoptera: Noctuidae*) to (Z)-7-dodecen-1-OL acetate (pheromone) in the field.**

Sharp, J.L. James, J. Athens, Ga., The Society. Journal. Georgia Entomological Society. July 1979. v. 14 (3). p. 263-269. ill. 6 ref. (NAL Call No.: QL461.G4).

0618

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0619

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Harper, J.D. FETMA. Gainesville : Florida Entomological Society. Florida entomologist. June 1983. v. 66 (2). p. 280-281. Includes references. (NAL Call No.: 420 F662).

0620

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Ottens, R.J. Todd, J.W. College Park, Md., Entomological Society of America. Journal of economic entomology. Feb 15, 1980. v. 73 (1). p. 55-57. ill. 9 ref. (NAL Call No.: 421 J822).

0621

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McWhorter, R.E. Grant, J.F.; Shepard, M. Clemson, S.C. : South Carolina Entomological Society. Journal of agricultural entomology. Jan 1984. v. 1 (1). p. 68-77. ill. Includes references. (NAL Call No.: SB599.J69).

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0623

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Shukle, R.H. EVETB. Murdock, L.L. College Park : Entomological Society of America. Environmental entomology. June 1983. v. 12 (3). p. 787-791. Includes references. (NAL Call No.: QL461.E532).

0624

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McPherson, R.M. GENSA. Ravlin, F.W. Athens : The Society. Journal of the Georgia Entomological Society. Jan 1983. v. 18 (1). p. 58-60. Includes references. (NAL Call No.: QL461.G4).

0625

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anada, G.A. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Apr 1979. v. 63 (4). p. 309-312. ill. 11 ref. (NAL Call No.: 1.9 P69P).

0626

**Managing soybean insects.**

Smith, R.H. San Francisco, California Farmer. Agrichemical age. June 1980. v. 24 (6). p. 26-28. ill. (NAL Call No.: 381 AG85).

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0627

**A manual for implementing an integrated pest management program for insects in soybean / William A. Allen, Robert M. McPherson.**  
Allen, William A. (William Albert), 1939. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1982. Pesticide Applicator Training collection ~"July 1982.". 12 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-016).

0628

**Method for determining age structure of adult populations of the lesser cornstalk borer (Lepidoptera: Pyralidae) (Elasmopalpus lignosellus, peanuts, soybeans, corn, grain sorghum).**  
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0629

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1981. This discusses the Mexican bean beetle's distribution, appearance, life cycle, damage, chemical and natural control, and the stages of soybean development. Document available from: Ext. Office of Information, Ohio State University, 2120 Fyffe Road, Columbus, OH 43210. 1 sheet : ill. (NAL Call No.: Not available at NAL.). (NAL Call No.: Field Ent Series 21).

0630

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0631

**Microorganisms associated with feeding and from various organs of Nezara viridula (capable of transmitting Nematospora coryli, the causative agent of yeast spot disease in soybean).**  
Ragsdale, D.W. Larson, A.D. College Park, Md., Entomological Society of America. Journal of economic entomology. Oct 1979. v. 72 (5). p. 725-731. ill. 13 ref. (NAL Call No.: 421 J822).

0632

**Microspatial distribution of pupal green cloverworms, Plathypena scabra (F.) (Lepidoptera: Noctuidae), in Iowa soybean fields.**  
Bechinski, E.J. EVETB. Pedigo, P.L. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 273-276. ill. Includes references. (NAL Call No.: QL461.E532).

0633

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0634

**Modeling the impact of natural enemies on insect pests of soybean (Pest population models, agroecosystems).**  
Stimac, J.L. SCSBA. O'Neil, R.J. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. June 1983. Regional Research Project S-74. June 1983. (285). p. 78-87. ill. Includes references. (NAL Call No.: 100 G29S0).

0635

**Morphological and physiological parameters of soybean resistance to agromyzid beanflies.**  
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0636

**Mortality of Heliothis spp. larvae treated with Heliothis zea nuclear polyhedrosis virus spray adjuvant combinations on cotton and soybean (Biological control).**  
Luttrell, R.G. GENSA. Yearian, W.C.; Young, S.Y. Athens : The Society. Journal of the Georgia Entomological Society. Oct 1982. v. 17 (4). p. 447-453. Includes references. (NAL Call No.: QL461.G4).

0637

**Natural enemies of arthropod pests in soybean / H.N. Pitre, editor.**  
Pitre, H. N. (Clemson, S.C.?) South Carolina Agricultural Experiment Station 1983. Regional research project S-74 ~"June 1983.". v. 90 p. : ill. ; 28 cm. -. Includes bibliographies. (NAL Call No.: 100 G29S0 no.285).

0638

**Natural mortality of lepidopteran eggs and larvae in Missouri soybeans (*Trichoplusia ni*, *Glycine max*).**  
 Marston, N.L. Hostetter, D.L.; Pinnell, R.E.; Dickerson, W.A.; Smith, D.B. College Park : The Society. Annals of the Entomological Society of America. Jan 1984. v. 77 (1). p. 21-28.  
 Includes references. (NAL Call No.: 420 EN82).

0639

**New techniques for the aerial release of *Trichogramma pretiosum* (Biological control of Lepidoptera pests on cotton and soybeans).**  
 Jones, S.L. Morrison, R.K. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Mar 1979. v. 4 (1). p. 14-19. ill. 9 ref. (NAL Call No.: QL461.S65).

0640

**Non-movement of cowpea chlorotic mottle virus from cowpea and soybean (*Diabrotica undecimpunctata howardii*, insect vectors).**  
 Demski, J. Chalkley, J. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Sept 1979. v. 63 (9). p. 761-764. ill. 9 ref. (NAL Call No.: 1.9 P69P).

0641

**Observations on seasonal developmental of bean leaf beetle, *Cerotoma trifurcata* (Forster) and incidence of bean pod mottle virus in Arkansas soybean.**  
 Mueller, A.J. Haddox, A.W. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Oct 1980. v. 15 (4). p. 398-403. ill. 9 ref. (NAL Call No.: QL461.G4).

0642

**Occurrence of a leafhopper-transmitted disease of soybeans in Louisiana (*Scaphytopius acutus*, possible mycoplasmal disease, soybean bud proliferation, insect vectors).**  
 Derrick, K.S. Newsom, L.D. St. Paul, Minn. : American Phytopathological Society. Plant disease. Apr 1984. v. 68 (4). p. 343-344. ill. Includes references. (NAL Call No.: 1.9 P69P).

0643

**Occurrence of the velvetbean caterpillar (*Anticarsia gemmatilis*) in Mississippi: winter survival or immigration (Soybeans).**  
 Buschman, L.L. Pitre, H.N.; Hovermale, C.H.; Edwards, N.C. Jr. College Park, Md., Entomological Society of America. Environmental entomology. Feb 1981. v. 10 (1). p. 45-52.

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0644

***Odontota horni*, a hispine leaf miner adapted to soybean feeding in Illinois.**  
 Kogan, M. Kogan, D.D. College Park, Md., The Society. Annals Entomological Society of America. July 15, 1979. v. 72 (4). p. 456-461. ill. 15 ref. (NAL Call No.: 420 EN82).

0645

**Optimal control of crop-pest interactions: a simulation approach (Soybean and insect growth models).**  
 Tucker, T.E. Zavaleta, L.R.; Liebman, J.S. Pittsburgh : School of Engineering, University of Pittsburgh. Annual Pittsburgh Conference on Modeling and Simulation. 1983. v. 14 (pt.1/2). p. 181-186. ill. Includes references. (NAL Call No.: TA343.P5).

0646

**Overwintering behavior and spring colonization of soybean by the bean leaf beetle (*Coleoptera:Chrysomelidae*) in Illinois (*Cerotoma trifurcata*).**  
 Jeffords, M.R. EVETB. Helm, C.G.; Kogan, M. College Park : Entomological Society of America. Environmental entomology. Oct 1983. v. 12 (5). p. 1459-1463. Includes references. (NAL Call No.: QL461.E532).

0647

**Ovicidal effect of some insecticides on the eggs of the girdle-beetle, *Oberea brevis* Swed. (*Coleoptera: Lamiidae*) on soybean.**  
 Singh, D.P. Jakhmola, S.S. New Delhi, Indian Council of Agricultural Research. Indian journal of agricultural sciences. Nov 1978. v. 48 (11). p. 669-671. ill. 4 ref. (NAL Call No.: 22 AG83I).

0648

**Oviposition preference of the seedcorn maggot (*Hylemya platura*) for various developmental stages of soybeans (Includes also lima beans).**  
 Ibrahim, Y.B. Hower, A.A. Jr. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 64-66. ill. 8 ref. (NAL Call No.: 421 J822).

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0649

**Oviposition sites of *Orius insidiosus* (Say) and *Nabis* spp. in soybean (Hemiptera: Anthocoridae and Nabidae) (USA).**

Isenhour, D.J. Yeargan, K.V. Lawrence, Kan., The Society. Journal of the Kansas Entomological Society. Jan 1982. v. 55 (1). p. 65-72. ill. Includes 12 ref. (NAL Call No.: 420 K13).

0650

**Ovipositional and feeding preference of leafhoppers (*Empoasca fabae*) (Homoptera: Cicadellidae) on Clark soybeans in relation to plant pubescence.**

Robbins, J.C. Daugherty, D.M. Manhattan. Journal Kansas Entomological Society. July 1979. v. 52 (3). p. 603-608. ill. 9 ref. (NAL Call No.: 420 K13).

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**Temperature modification of female sex pheromone release in *Trichoplusia ni* (Hubner) and *Pseudoplusia includens* (Walker) (*Lepidoptera: Noctuidae*) (Cabbage and soybean loopers).**

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0757

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0762

**Control of Columbia lance nematode for soybeans, 1979 (*Glycine max* 'Bragg'), lance nematode; *Hoplolaimus columbus*).**  
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0763

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0766

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0767

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**Control of plant parasitic nematodes on soybean, 1979 (Soybean (*Glycine max* 'Essex'), root-knot nematode; *Meloidogyne hapla*, spiral nematode; *Helicotylenchus* sp., cyst nematode; *Heterodera glycines*).**

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**Control of soybean cyst nematode with chemicals and a resistant variety, 1979 and 1980 (Soybean (*Glycine max* 'Amsoy 7L', 'Franklin'), soybean cyst nematode; *Heterodera glycines*).**

Bergeson, G.B. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1982. v. 37. p. 198-199. (NAL Call No.: 464.9 AM31R).

0770

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**Control of soybean cyst nematode, 1982 (*Heterodera glycines* on *Glycine max*).**

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0772

**Control of soybean damping-off with four fungicides with and without Nematrol at Sonora, 1975 (Soybean (*Glycine max*), damping off; *Rhizoctonia solani*, *Pythium* sp., nematodes; *Meloidogyne* spp., *Pratylenchus* spp.).**

Anda R., V. de. Silva Z., J. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 109. (NAL Call No.: 464.9 AM31R).

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0774

**Control of soybean damping-off with three fungicides in presence and absence of Nematrol at Sinaloa, 1975 (Soybean (*Glycine max*), damping off; *Rhizoctonia solani*, *Pythium* sp., *Fusarium* sp., nematodes; *Meloidogyne* spp., *Pratylenchus* spp.).**

Anda R., V. de. Silva Z., J. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 110. (NAL Call No.: 464.9 AM31R).

0775

**Control of the Columbia lance nematode on soybean, 1980 (Soybeans (*Glycine max* 'Bragg', 'Davis', 'Centennial'), Columbia lance nematode; *Hoplolaimus columbus*).**

Blackmon, C.W. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 185-186. (NAL Call No.: 464.9 AM31R).

0776

**Control of the root-lesion nematode (*Pratylenchus penetrans*) associated with soybeans, 1979 (Soybean (*Glycine max*), root-lesion nematode; *Pratylenchus penetrans*).**

Elliott, A.P. Bird, G.W.; Davenport, J. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 230. (NAL Call No.: 464.9 AM31R).

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Riggs, R.D. AR. Fayetteville, The Station. Arkansas farm research - Arkansas, Agricultural Experiment Station. Mar/Apr 1980. v. 29 (2). p. 3. ill. (NAL Call No.: 100 AR42F).

0778

### Cotton-soybean rotation for reniform nematode control (*Rotylenchulus reniformis*, resistant cultivars, Louisiana).

Williams, C.LAXBA. Gilman, D.F.; Jones, J.E.; Birchfield, W. Baton Rouge : The Station. Bulletin - Louisiana Agricultural Experiment Station. Jan 1983. Jan 1983. (741). 22 p. Includes references. (NAL Call No.: 100 L93 (1)).

0779

### Cover crops and soybean cyst nematode (*Heterodera glycines*, *Vicia villosa*).

Riggs, R.D. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1980. v. 29 (6). 16 p. ill. (NAL Call No.: 100 AR42F).

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### Cut harvest woes (Soybeans, nematodes).

Abbott, S. St. Louis, Mo., American Soybean Association. Soybean digest. Sept/Oct 1980. v. 40 (9). p. 225. (NAL Call No.: 60.38 S09).

0781

### Cyst nematode screening methods, indexes and their use (*Heterodera glycines*, soybeans, resistance).

Beatty, K.D. Riggs, R.D.; Widick, D.; Caviness, C.E.; Eldridge, I.L.; Hancock, F.; Davis, J. Ames : The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1983. v. 10. p. 17-20. (NAL Call No.: aSB205.S7S6).

0782

### Damage and reproductive potentials of *Pratylenchus brachyurus* and *Pratylenchus penetrans* on soybean.

Schmitt, D.P. Barker, K.R. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1981. v. 13 (3). p. 327-332. ill. 22 ref. (NAL Call No.: QL391.N4J62).

0783

### Damage thresholds for nematodes on soybean for the 1983 growing season (Soil sampling methods).

Schmitt, D.P. Barker, K.R. Raleigh : The Service. AG - North Carolina Agricultural Extension Service, North Carolina State University. June 1982. June 1982. (288). 4 p. ill. Includes references. (NAL Call No.: S544.3.N6N62).

0784

### Description of *Hoplolaimus magnistylus* n. sp. (Nematoda: Hoplolaimidae) (found in soil about roots of soybean in Arkansas and Mississippi).

Robbins, R.T. JONEB. Ames : Society of Nematologists. Journal of nematology. Oct 1982. v. 14 (4). p. 500-506. ill. Includes references. (NAL Call No.: QL391.N4J62).

0785

### Dispersion and distribution of *Pratylenchus scribneri* and *Hoplolaimus galeatus* in soybean fields (Indiana).

Alby, T. Ferris, J.M.; Ferris, V.R. Ames, Iowa : Society of Nematologists. Journal of nematology. July 1983. v. 15 (3). p. 418-426. ill. Includes references. (NAL Call No.: QL391.N4J62).

0786

### Early planting of soybeans in cyst-infested soil and the effects on the size and number of nodules (Nematodes, rhizobium, inhibition).

Pacumbaba, R.P. Sapra, V.T. Normal : The School. Annual research report - School of Agriculture. Environmental Science and Home Economics. Alabama Agricultural and Mechanical University. 1983. 1983. (12th). p. 91-94. ill. Includes references. (NAL Call No.: S537.A2A34).

0787

### Economic analysis of alternative controls of the soybean cyst nematode in Southern Illinois.

Reis, R.P. Noel, G.R.; Swanson, E.R. Urbana, Ill., The Department. Extract: In this report we illustrate the economic logic of analyzing various control methods for soybean cyst nematode. They are: soybean variety, crop sequence, use of a nematicide, and fertilization. Unfortunately there was no single experimental data base which had considered all of these control methods and the potential interactions among them. Consequently it was necessary to synthesize from various sources a set of soybean yield data reflecting the yield consequences of the various control measures. Illinois agricultural economics staff paper, series E, agricultural economics - Dept. of Agricultural Economics, University of

Illinois. Dec 1981. Dec 1981. (81 E-203). 17 p.  
12 ref. (NAL Call No.: 916937(AGE)).

0788

**Economic analysis of the impact of registration cancellation of 1,2-dibromo-3-chloropropane (DBCP).**

Schmidt, K.M. Swanson, E.R. Urbana, Ill., The Department. Extract: Three methods were used to evaluate the impact of cancellation of the registration of DBCP as a nematicide on the 1,830,000 acres of soybeans treated with DBCP in 1977. The first two methods specified use patterns for substitutes and also made specific assumptions about the relative efficacy of the nematicides. Economic impact estimates were made without ethylene dibromide (EDB) as an alternative and with EDB as an alternative. Illinois agricultural economics staff paper, series E, agricultural economics - Dept. of Agricultural Economics, University of Illinois. Apr 1981. Apr 1981. (81 E-161). 51 p. 51 ref. (NAL Call No.: 916937(AGE)).

0789

**Economic impact of registration of ethylene dibromide (EDB) for use on soybeans.**

Schmidt, K.M. Swanson, E.R. Urbana, Ill., The Department. Extract: Estimates of the economic impact of federal registration of EDB for use as a nematicide on soybeans were developed for two scenarios. Scenario I assumes that EDB is limited to soybean acreage presently treated with other fumigant nematicides. This limit was removed in Scenario II to allow EDB to be substituted for both fumigants and systemic nematicides. The total welfare impact in terms of changes in producers' rents plus consumers' surplus was estimated with a simulation model (AGSIM). These impacts were measured by the present value of an infinite series of future changes resulting from the registration of EDB. Estimated present value of the total welfare gains from the Section 24(c) exemptions is about 700 million dollars with approximately an additional one percent gain from a nation-wide registration. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. Apr 1981. Apr 1981. (82 E-218). 87 p. Bibliography p. 69-87. (NAL Call No.: 916937(AGE)).

0790

**Effect of nematicides and application method on the soybean cyst nematode and soybean yield, 1982 (Heterodera glycines on Glycine max).**

Elliott, A.FNETD. Phipps, P.M.; Babineau, D.; Taylor, J. (s.l.): The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 8. (NAL Call No.: 464.9 AM31R).

0791

**Effect of nematicides and application methods on sting nematode (Belonolaimus longicaudatus) control, root nodulation, and yield of soybeans.**

Rhoades, H.L. n.p., The Society. Proceedings - Soil and Crop Science Society of Florida. 1980. v. 39. p. 90-92. 8 ref. (NAL Call No.: 56.9 S032).

0792

**Effect of nematicides on crop yield and control of soybean cyst nematode, 1980 (Soybean (Glycine max 'Corsoy', 'L-76-129', and 'L-76-141'), soybean cyst nematode; Heterodera glycines).**

Zirakparvar, M.E. Norton, D.C.; Nyvall, R. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 187. (NAL Call No.: 464.9 AM31R).

0793

**Effect of the soybean cyst nematode on soybean production under different management systems (Continuous cropping, 1976-1981, Mississippi).**

Hartwig, E.E. Buehring, N.; Young, L.D. Mississippi State : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Apr 1983. v. 46 (4). p. 6-7. (NAL Call No.: 100 M69MI).

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0795

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0803

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0804

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0805

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0806

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0807

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Rodriguez-Kabana, R. AL. Mawhinney, P.G.  
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0812

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0814

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Zirakparvar, M.E. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Aug 1980. v. 70 (8). p. 749-753. ill. 15 ref. (NAL Call No.: 464.8 P56).

0819

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0820

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0821

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0829

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#### 0831

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#### 0833

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#### 0834

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Rebois, Raymond Victor, 1924. 1971. Thesis (Ph.D.)--Auburn University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1972. xiii, 123 leaves ; 21 cm. Bibliography: leaves 66-82. (NAL Call No.: DISS 71-27,841).

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#### 0838

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#### 0840

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0842

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Robbins, R.T. AR. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. July/Aug 1980. v. 29 (4). p. 7. ill. (NAL Call No.: 100 AR42F).

0843

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Slack, D. A. Fayetteville, Ark. Agricultural Experiment Station 1981. Cover title. 36 p. : ill. ; 23 cm. -. (NAL Call No.: 100 Ar42R no.263).

0844

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0845

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0847

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Anand, S.C. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1982. v. 66 (10). p. 933-934. 3 ref. (NAL Call No.: 1.9 P69P).

0848

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Morgan-Jones, G. Gintis, B.O.; Rodriguez-Kabana, R. Bronx, N.Y. : The New York Botanical Garden. Mycologia. Mar/Apr 1984. v. 76 (2). p. 211-217. ill. Includes references. (NAL Call No.: 450 M99).

0849

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0850

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0851

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0852

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Zirakparvar, M.E. Norton, D.C. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1981. v. 65 (10). p. 807-809. 8 ref. (NAL Call No.: 1.9 P69P).

0853

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Gawley, E.C. JONEB. Chapman, R.A. Ames : Society of Nematologists. Journal of nematology. Oct 1982. v. 14 (4). p. 572-575. Includes references. (NAL Call No.: QL391.N4J62).

0854

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Schmitt, D.P. Corbin, F.T.; Nelson, L.A. Ames, S.G.; Riggs, R.D. Ames : Society of Nematologists. Journal of nematology. July 1983. v. 15 (3). p. 432-437. Includes references. (NAL Call No.: QL391.N4J62).

0855

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Griffith, T.W. JONEB. Koehler, N.J.; Coker, S.G.; Riggs, R.D. Ames : Society of Nematologists. Journal of nematology. Oct 1982. v. 14 (4). p. 598-599. Includes references. (NAL Call No.: QL391.N4J62).

0856

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Kinloch, R.A. Ames, Iowa, Society of Nematologists. Journal of nematology. Apr 1982. v. 14 (2). p. 162-167. Includes 9 ref. (NAL Call No.: QL391.N4J62).

0857

**The relationship of podworm, *Heliothis zea*, infestations to the reduction of soybean yields in Alabama / Ronald H. Smith.**

Smith, Ronald H. (Ronald Harmon), 1942. 1970. Thesis (Ph.D.)--Auburn University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xv, 118 leaves ; 21 cm. Bibliography: leaves 113-118. (NAL Call No.: DISS 71-9,044).

0858

**Reproduction of differentially selected soybean cyst nematode populations on soybeans (*Heterodera glycines*).**

Young, L.D. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 385-388. Includes 14 ref. (NAL Call No.: 64.8 C883).

0859

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Young, L.D. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1982. v. 66 c (3). p. 251-252. Includes 9 ref. (NAL Call No.: 1.9 P69P).

0860

**Response of a resistant soybean cultivar to fumigation at planting for the control of soybean cyst (*Heterodera glycines*) and root-knot nematodes (*Meloidogyne incognita*, USA).**

Kinloch, R.A. Gainesville, Fla., Organization of Tropical American Nematologists. Nematropica. Apr 1979. v. 9 (1). p. 27-32. 6 ref. (NAL Call No.: SB998.N4N4).

0861

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Barker, K.R. JONEB. Schmitt, D.P.; Campos, V.P. Ames : Society of Nematologists. Journal of nematology. Oct 1982. v. 14 (4). p. 576-581. Includes references. (NAL Call No.: QL391.N4J62).

0862

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Hartwig, E.E. Epps, J.M.; Buehring, N. St. Paul, Minn., American Phytopathological Society. Plant disease. Jan 1982. v. 66 (1). p. 18-20. 4 ref. (NAL Call No.: 1.9 P69P).

0863

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Minton, N.A. AR-SO. Parker, M.B. Gainesville, Fla., Organization of Tropical American Nematologists. Nematropica. Apr 1980. v. 10 (1). p. 31-37. Includes 9 ref. (NAL Call No.: SB998.N4N4).

0864

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Blackmon, C.W. Lewis, S.A. Gainesville, Fla., Organization of Tropical American Nematologists. Nematropica. Apr 1979. v. 9 (1). p. 3-7. 4 ref. (NAL Call No.: SB998.N4N4).

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0865

Response of two soybean cultivars to chemical control of soybean cyst nematode, 1982 (Heterodera glycines, Glycine max Essex and Forrest varieties, comparison). Phipps, P.M.FNETD. Elliott, A.P. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 11. (NAL Call No.: 464.9 AM31R).

0866

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0867

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0868

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0908

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0925

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0928

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0932

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Horn, N.L. Fontenot, M.F. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 111. (NAL Call No.: 464.9 AM31R).

0933

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Almeida, A.M.R. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 162. (NAL Call No.: 464.9 AM31R).

0934

Control of foliar, pod and stem diseases of no-till soybeans, 1980 (Soybean (*Glycine max* 'Davis'), foliar disease; *Cercospora sojae*, *Septoria glycines*, pod and stem disease; *Glomerella glycines*, *Phomopsis* sp.).

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0935

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Blackman, C.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 110-111. (NAL Call No.: 464.9 AM31R).

0936

Control of *Phytophthora* root rot of soybean with Grandstand seed treatment, 1982

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0937

Control of *Setosphaeria* leaf blight of soybean with foliar chemical sprays, 1980 (Soybean (*Glycine max* 'Bragg'), leaf blight; *Setosphaeria glycinea*).

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0938

Control of soybean damping-off with four fungicides with and without Nematrol at Sonora, 1975 (Soybean (*Glycine max*), damping off; *Rhizoctonia solani*, *Pythium* sp., nematodes; *Meloidogyne* spp., *Pratylenchus* spp.).

Anda R., V. de. Silva Z., J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 109. (NAL Call No.: 464.9 AM31R).

0939

Control of soybean damping-off with Terrazan in presence and absence of Nematrol, 1975 (Soybean (*Glycine max*), damping off; *Rhizoctonia solani*, *Pythium* sp., *fusarium* sp., nematodes; *Meloidogyne* spp., *Pratylenchus* spp.).

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0940

Control of soybean damping-off with three fungicides in presence and absence of Nematrol at Sinaloa, 1975 (Soybean (*Glycine max*), damping off; *Rhizoctonia solani*, *Pythium* sp., *Fusarium* sp., nematodes; *Meloidogyne* spp., *Pratylenchus* spp.).

Anda R., V. de. Silva Z., J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 110. (NAL Call No.: 464.9 AM31R).

0941

Control of soybean diseases by fungicide sprays, 1979 (Soybean (*Glycine max* 'Davis', 'Bragg', 'Hardee' and 'Bossier'), foliar, stem and pod diseases).

Almeida, A.M.R. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 107. (NAL Call No.: 464.9 AM31R).

0942

Cooperation spurs resistant soybeans (Phialophora gregata, brown stem rot, varieties, Iowa).

Pierce, R. SEA-AR-NC. Washington, D.C., The Administration. Extension review - United States Department of Agriculture, Science and Education Administration. Summer 1980. v. 51 (3). p. 24-25. ill. (NAL Call No.: 1 EX892EX).

0943

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Backman, P.A. Rodriguez-Kabana, R. St. Paul, American Phytopathological Society. Phytopathology. June 1979. v. 69 (6). p. 562-564. ill. 9 ref. (NAL Call No.: 464.8 P56).

0944

*Curvularia cymbopogonis*, a pathogen of itchgrass (*Rottboellia exaltata*) (a serious weed of soybeans) in southern Louisiana (Biological control).

Walker, H.L. White, J.C. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Aug 1979. v. 63 (8). p. 642-644. ill. 13 ref. (NAL Call No.: 1.9 P69P).

0945

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0946

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0947

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Helbig, J.B. Carroll, R.B. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1984. v. 68 (8). p. 694-696. Includes 16 references. (NAL Call No.: 1.9 P69P).

0948

Disease outlook: wet weather spells trouble (*Heterodera glycines*, soybeans, fungus diseases).

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0949

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0950

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0951

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0952

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0953

**Early events of pathogenesis of zoospores of Phytophthora megasperma f. sp. Glycinea on resistant and susceptible soybean roots (Scanning electron microscopy).**

Ristaino, J.B. Rissler, J.F. College Park, Md. : Univ. of Maryland, Electron Microscop. Cent. Facil., Dept. of Mechanical Engineering. Newsletter - Electron Microscope Central Facility. Apr 1983. Apr 1983. (11). p. 15-17. ill. Includes references. (NAL Call No.: QH212.E4E4).

0954

**Ecology of a sterile white pathogenic basidiomycete in corn, peanut, soybean, and snap bean field microplots (Rhizoctonia solani, Zea mays, Arachis hypogaea, Glycine max, Phaseolus vulgaris, soilborne fungi, Georgia).** Bell, D.K. Sumner, D.R. St. Paul, American Phytopathological Society. Plant disease. Jan 1984. v. 68 (1). p. 18-22. Includes references. (NAL Call No.: 1.9 P69P).

0955

**Effect of Benlate on disease of soybeans grown in potassium-deficient and fertile soils, 1979 (Soybean (Glycine 'Tracy', 'Centennial'), Cercospora leaf blight; Cercospora kikuchii, anthracnose; Colletotrichum dematium var. truncata, pod and stem blight; Diaporthe phaseolorum var. sojae, seedborne fungi).** Roy, K.W. Buehring, N.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 99. (NAL Call No.: 464.9 AM31R).

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0957

**Effect of Chaetomium cupreum on seed germination and antagonism to other seedborne fungi of soybean.**

Yeh, C.C. Sinclair, J.B. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1980. v. 64 (5). p. 468-470. ill. 5 ref. (NAL Call No.: 1.9 P69P).

0958

**Effect of chemical soil treatment on plant growth, nitrogen fixation, and fungal colonization of Rhizobium nodules of soybeans (Rhicotonia japonicum, Glycine max, fungal pathogens).**

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0959

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Kucharek, T. (S.l.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1982. v. 41. p. 59-62. Includes references. (NAL Call No.: 56.9 S032).

0960

**Effect of date of harvest maturity on soybean seed quality and Phomopsis sp. seed infection (Glycine max, germination vigor).**

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0961

**Effect of foliar application of benomyl on infection of soybean seeds by Phomopsis in relation to time of inoculation.**

McGee, D.C. Brandt, C.L. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Aug 1979. v. 63 (8). p. 675-677. ill. 10 ref. (NAL Call No.: 1.9 P69P).

## (PLANT DISEASES - FUNGAL)

0962

Effect of foliar applied fungicides on disease control and yield of 'Tracy' soybeans, 1977 (Soybean (*Glycine max* 'Tracy'), pod and stem blight; *Diaporthe phaseolorum* var. *sojae*, anthracnose; *Colletotrichum dematium* var. *truncata*, purple leaf stain; *Cercospora kikuchii*). Sciumbato, G.L. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 114. (NAL Call No.: 464.9 AM31R).

0963

Effect of foliar fungicides on brown spot control and yield of soybeans, 1981 (Soybean (*Glycine max* 'Woodworth'), brown spot; *Septoria glycines*). Scott, D.H. Akers, D.P. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1982. v. 37. p. 106-107. (NAL Call No.: 464.9 AM31R).

0964

Effect of foliar fungicides on brown spot control and yield of 'Williams' soybeans at Lexington, KY, 1980 (Soybean (*Glycine max* 'Williams'), brown spot; *Septoria glycines*). Stuckey, R.E. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 101. (NAL Call No.: 464.9 AM31R).

0965

Effect of foliar fungicides on control of anthracnose on four soybean varieties, 1982 (*Colletotrichum dematium* var. *truncata*, *Glycine max*, comparison of varieties). Whitney, N.G.FNETD. (s.l.) : The Society. Fungicide and nematocide tests : results - American Phytopathological Society. 1983. v. 38. p. 83-84. (NAL Call No.: 464.9 AM31R).

0966

Effect of foliar fungicides on disease control and yield of five soybean varieties, 1979 (Soybean (*Glycine max* 'Davis', 'Dare', 'Dowling', 'Tracy' and 'Bragg'), anthracnose; *Colletotrichum dematium* var. *truncata*, pod and stem blight; *Diaporthe phaseolorum* var. *sojae*). Whitney, N.G. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 117-118. (NAL Call No.: 464.9 AM31R).

0968

Effect of foliar fungicides on disease control and yield of 'Williams' soybeans at Princeton Kentucky, 1981 (Soybean (*Glycine max* 'Williams'), pod and stem blight; *Diaporthe phaseolorum* var. *sojae* (Phomopsis), anthracnose; *Colletotrichum dematium* var. *truncata*). Stuckey, R.E. McCarter-Zorner, N.J. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1982. v. 37. p. 107. (NAL Call No.: 464.9 AM31R).

0967

Effect of foliar fungicides on disease control and yield of 'Williams' soybeans at Princeton, Kentucky, 1980 (Soybean (*Glycine max* 'Williams'), pod and stem blight; *Diaporthe phaseolorum* var. *sojae* (Phomopsis), anthracnose; *Colletotrichum dematium* var. *truncata*, brown spot; *Septoria glycines*). Stuckey, R.E. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 101. (NAL Call No.: 464.9 AM31R).

0969

Effect of foliar fungicides on disease control and yield of 'Williams' soybeans, 1979 (Soybean (*Glycine max* 'Williams'), pod and stem blight; *Diaporthe phaseolorum* var. *sojae* (Phomopsis), brown spot; *Septoria glycines*). Stuckey, R.E. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 114-115. (NAL Call No.: 464.9 AM31R).

0970

Effect of foliar fungicides on soybean seed infection by Phomopsis, seed germination and yield, 1979 (Soybean (*Glycine max* 'Amsoy 71'), pod and stem blight; *Phomopsis* spp.). McGee, D.C. Kolmer, J.; Wacha, A. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 96-97. (NAL Call No.: 464.9 AM31R).

0971

Effect of fungicidal seed treatment on plant stand and yield of soybean; 1977, 1978 and 1979 (Soybean (*Glycine max* 'Bragg'), seed and seedling rot; *Rhizoctonia bataticola*). Sarbhoy, A.K. Agarwal, D.K.; Goswamy, K.; Mann, D.S. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1982. v. 37. p. 174. (NAL Call No.: 464.9 AM31R).

0972

Effect of fungicidal seed treatments on plant stands and yield of soybean in Texas, 1982 (Pre- and postemergence damping off and root rot, *Pythium* spp., *Rhizoctonia solani*, *Phomopsis* sp., *Glycine max*). Whitney, N.G.FNETD. (s.l.) : The Society. Fungicide and nematocide tests : results - American Phytopathological Society. 1983. v. 38. p. 33. (NAL Call No.: 464.9 AM31R).

0973

Effect of fungicide sprays on internally seedborne fungi, seed germination and field emergence of soybean in Puerto Rico. Ellis, M.A. Paschal, E.H. II. Ibadan, International Grain Legume Information Centre. Tropical grain legume bulletin. 1978. 1978. (11/12). p. 31-34. ill. 5 ref. (NAL Call No.: SB111.A2T74).

0974

Effect of fungicide sprays on seed-borne pathogens of soybean, 1979 (Soybean (*Glycine max* 'Bragg' and 'Davis'), foliar, stem and pod diseases). Almeida, A.M.R. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 107-108. (NAL Call No.: 464.9 AM31R).

0975

Effect of fungicide treatment and harvesting date on soybean foliar diseases and yield, 1979 (Soybean (*Glycine max* 'Tracy' and 'Forrest'), pod and stem blight; *Diaporthe phaseolorum* var. *sojae*, anthracnose; *Colletotrichum dematium* var. *truncata*, purple leaf stain; *Cercospora kikuchii*). Sciumbato, G.L. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 100. (NAL Call No.: 464.9 AM31R).

0976

Effect of fungicides on control of soybean diseases, 1979 (Soybean (*Glycine max* 'Davis', 'Bragg' and 'Parana'), foliar, stem and pod diseases). Almeida, A.M.R. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 108. (NAL Call No.: 464.9 AM31R).

0977

The effect of late-season application of benomyl (Benlate) (fungicide) on yield and quality of soybeans. Sciumbato, G.L. Andrews, C.H.; Davis, R.G. Mississippi State, The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Aug 1981. v. 44 (8). p. 1-2. ill. (NAL Call No.: 100 M69MI).

0978

Effect of metalaxyl fungicide on downy mildew of soybeans (*Glycine max*, *Peronospora manshurica*). Johnson, S.B. Berger, R.D. (S.l.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1982. v. 41. p. 101-102. Includes references. (NAL Call No.: 56.9 S032).

0979

Effect of nontreated field soil on sporulation of vesicular-arbuscular mycorrhizal fungi associated with soybean (*Glomus macrocarpus*, *Gigaspora gigantea*). Ross, J.P. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1980. v. 70 (12). p. 1200-1205. ill. 12 ref. (NAL Call No.: 464.8 P56).

0980

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0981

Effect of seedborne *Diaporthe phaseolorum* var. *sojae* (pod and stem blight) on germination, emergence, and vigor of soybean seedlings. Kulik, M.M. Schoen, J.F. Laramie, The Station. Science monograph - University of Wyoming. Agricultural Experiment Station. May 1981. v. 71 (5). p. 544-547. 19 ref. (NAL Call No.: S131.E2).

0982

Effect of simulated dew and postinoculation moist periods on infection of soybean by *Septoria glycines* (Brown spot, *glycine max*). Ross, J.P. St. Paul, Minn., American Phytopathological Society. Phytopathology. Feb 1982. v. 72 (2). p. 236-238. Includes 13 ref. (NAL Call No.: 464.8 P56).

## (PLANT DISEASES - FUNGAL)

0983

Effect of soil fumigation on survival of *Macrophomina phaseolina* in soybean stem residue.

Gray, L.E. St. Paul, American Phytopathological Society. *Phytopathology*. May 1979. v. 69 (5). p. 540. (NAL Call No.: 464.8 P56).

0984

Effect of soybean leaflet type on susceptibility to aerial blight (*Rhizoctonia solani*).

Griffin, J.L. Gilman, D.F.; Habetz, R.J. Crowley. Annual progress report Louisiana. Rice Experiment Station. 1980. 1980. (72nd). p. 361-362. (NAL Call No.: 100 L93 (3)).

0985

Effect of soybean seed treatments on emerged seedlings and yield, 1980 (Soybean (*Glycine max* 'Forrest'), pre- and postemergence damping off, various seed and soil-borne organisms).

Whitney, N.G. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 165. (NAL Call No.: 464.9 AM31R).

0986

Effect of soybean seed treatments on emerged seedlings, 1979 (Soybeans (*Glycine max* 'Williams'), pre- and postemergence damping-off, fungicides).

Stuckey, R.E. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 193. (NAL Call No.: 464.9 AM31R).

0987

Effect of soybean seed treatments on emergence and yield, 1981 (Soybeans (*Glycine max* 'Williams'), pre- and postemergence damping-off, fungicides).

Stuckey, R.E. McCarter-Zorner, N.J. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1982. v. 37. p. 174-175. (NAL Call No.: 464.9 AM31R).

0988

Effect of soybean seed treatments on seedling emergence, 1979 (Soybean (*Glycine max* 'Forest'), pre- and postemergence damping off, various seed and soil-borne organisms).

Whitney, N.G. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 194-195. (NAL Call No.: 464.9 AM31R).

0989

The effect of temperature on development of soybean rust (*Phakopsora pachyrhizi*).

Kochman, J.K. Melbourne, Commonwealth Scientific and Industrial Research Organization. *Australian journal of agricultural research*. Mar 1979. v. 30 (2). p. 273-277. ill. 8 ref. (NAL Call No.: 23 AU783).

0990

Effect of (the growth regulator) 2,3,5-triiodobenzoic acid on the susceptibility of soybeans to *Macrophomina phaseolina*.

Kroll, T.K. Moore, L.D. St. Paul, Minn., American Phytopathological Society. *Plant disease*. June 1981. v. 65 (6). p. 483-485. ill. 8 ref. (NAL Call No.: 1.9 P69P).

0991

Effect of thiophanate methyl applied in a low volume oil treatment on disease control and yield of soybeans (Fungicides).

Whitney, N.G. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Dec 1983. Dec 1983. (4182). 4 p. Includes references. (NAL Call No.: 100 T31P).

0992

Effect of three desiccant herbicides on soybean (*Glycine max*) seed quality (Seedborne fungi, in Illinois and Brazil).

Cerkauskas, R.F. Dhingra, D.D.; Sinclair, J.B.; Foor, S.R. Champaign, Ill., Weed Science Society of America. *Weed science*. Sept 1982. v. 30 (5). p. 484-490. 21 ref. (NAL Call No.: 79.8 W41).

0993

Effects of air temperature on disease severity and peroxidase activity of soybean leaves infected by *Peronospora manshurica*.

Dunleavy, J.M. Madison, Wis., Crop Science Society of America. *Crop science*. May/June 1982. v. 22 (3). p. 623-625. ill. 17 ref. (NAL Call No.: 64.8 C883).

0994

Effects of benomyl on the colonization of soybean leaves, pods, and seeds by fungi.

Miller, W.A. Roy, K.W. St. Paul, Minn., American Phytopathological Society. *Plant disease*. Oct 1982. v. 66 (10). p. 918-920. 10 ref. (NAL Call No.: 1.9 P69P).

0995

Effects of cultivars and cultural practices on Sclerotinia stem rot of soybean (*Sclerotinia sclerotiorum*, *Whetzelinia sclerotiorum*, *Glycine max*, Wisconsin).

Grau, C.R. Radke, V.L. St. Paul, American Phytopathological Society. Plant disease. Jan 1984. v. 68 (1). p. 56-58. Includes references. (NAL Call No.: 1.9 P69P).

0996

Effects of foliar fungicides on seed-borne fungi and seed germination, 1978 (Soybean (*Glycine max* 'Williams'), pod and stem blight; *Diaporthe phaseolorum* var. *sojae* (*Phomopsis* spp.), purple seed stain; *Cercospora kikuchii*). Stuckey, R.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 115-116. (NAL Call No.: 464.9 AM31R).

0997

Effects of fungicides on diseases and yield of soybeans, 1980 (Soybean (*Glycine max* 'Centennial'), frog-eye leaf spot; *Cercospora sojae*, *Cercospora* leaf blight; *Cercospora kikuchii*, anthracnose; *Colletotrichum dematium* var. *truncata*, pod and stem blight; *Diaporthe phaseolorum* var. *sojae*).

Roy, K.W. Buehring, N.; Miller, W.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 105-106. (NAL Call No.: 464.9 AM31R).

0998

Effects of fungicides on diseases and yield of soybeans, 1980 (Soybean (*Glycine max* 'Forrest'), frog-eye leaf spot; *Cercospora sojae*, anthracnose; *Colletotrichum dematium* var. *truncata*, pod and stem blight; *Diaporthe phaseolorum* var. *sojae*).

Roy, K.W. Arnold, B.; Miller, W.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 105. (NAL Call No.: 464.9 AM31R).

0999

Effects of fungicides on diseases and yield of soybeans, 1980 (Soybean (*Glycine max* 'Forrest'), frog-eye leaf spot; *Cercospora sojae*, *Cercospora* leaf blight; *Cercospora kikuchii*, anthracnose; *Colletotrichum dematium* var. *truncata*, pod and stem blight; *Diaporthe phaseolorum* var. *sojae*).

Roy, K.W. Miller, W.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 106. (NAL Call No.: 464.9 AM31R).

1000

Effects of glyphosate on glyceollin production and the expression of resistance to *Phytophthora megasperma* f. sp. *glycinea* in soybean (*Glycine max*, herbicides).

Keen, N.T. PHYTA. Holliday, M.U.; Yoshikawa, M. St. Paul : American Phytopathological Society. Phytopathology. Nov 1982. v. 72 (11). p. 1467-1470. 14 ref. (NAL Call No.: 464.8 P56).

1001

Effects of humidity, temperature, fertility, and cultivar on the reduction of soybean seed quality by *Phomopsis* sp.

Spilker, D.A. Schmitthenner, A.F.; Ellett, C.W. St. Paul, Minn., American Phytopathological Society. Phytopathology. Oct 1981. v. 71 (10). p. 1027-1029. 16 ref. (NAL Call No.: 464.8 P56).

1002

Effects of infection by *Phytophthora megasperma* var. *sojae* on the water relations of soybean.

Kittle, D.R. AR-NC. Gray, L.E. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1980. v. 20 (4). p. 504-507. 111. 14 ref. (NAL Call No.: 64.8 C883).

1003

Effects of natural selection in segregating soybean populations exposed to *Phytophthora* rot or soybean cyst nematode (*Phytophthora megasperma*, *Heterodera glycines*, breeding programs).

Hartwig, E.E. Kilen, T.C.; Young, L.D.; Edwards, C.J. Jr. Madison, Wis., Crop Science Society of America. Crop science. May/June 1982. v. 22 (3). p. 588-590. 6 ref. (NAL Call No.: 64.8 C883).

1004

Effects of rotations with susceptible and resistant peanuts, soybeans, and corn on inoculum efficiency of *Cylindrocladium crotalariae* on peanuts (*Arachis hypogaea*, *Glycine max*, *Zea mays*, root rot, North Carolina).

Black, M.C. Beute, M.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1984. v. 68 (5). p. 401-405. 111. Includes references. (NAL Call No.: 1.9 P69P).

## (PLANT DISEASES - FUNGAL)

1005

**Effects of row width and plant growth habit on Septoria (glycines) brown spot development and soybean yield.**

Pataky, J.K. Lim, S.J. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Oct 1981. v. 71 (10). p. 1051-1056. 22 ref. (NAL Call No.: 464.8 P56).

1006

**Effects of septoria brown spot on the yield components of soybeans (Septoria glycines).**

Pataky, J.K. Lim, S.M. St. Paul, Minn., American Phytopathological Society. *Plant disease*. July 1981. v. 65 (7). p. 588-590. Includes 16 ref. (NAL Call No.: 1.9 P69P).

1007

**Effects of temperature and leaf wetness period on brown spot disease of soybeans (Septoria glycines, Glycine max).**

Peterson, D.J. Edwards, H.H. St. Paul, American Phytopathological Society. *Plant disease*. Nov 1982. v. 66 (11). p. 995-998. ill. 14 ref. (NAL Call No.: 1.9 P69P).

1008

**The effects of vesicular-arbuscular mycorrhizae on uptake of Sr 90 by soybeans and on growth and phosphorus content of three agronomic crops / by Nelroy Evan Jackson.**

Jackson, Nelroy Evan, 1942. 1970. Thesis (Ph.D.)--Ohio State University, 1970. Photocopy. Ann Arbor, Mich.: University Microfilms, 1971. viii, 59 leaves; 21 cm. Bibliography: leaves 58-59. (NAL Call No.: DISS 71-18,026).

1009

**Efficacy of benomyl for controlling Septoria (glycines) brown spot of soybeans.**

Pataky, J.K. Lim, S.M. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Apr 1981. v. 71 (4). p. 438-442. 21 ref. (NAL Call No.: 464.8 P56).

1010

**Efficacy of fungicides for the control of soybean foliar diseases, 1980 (Soybean (Glycine max 'Bragg'), pod and stem blight; Diaporthe phaseolorum var. sojae, anthracnose; Collitotrichum dematrum var. truncata, brown spot; Septoria glycines).**

Hovermale, C.H. Sciombato, G.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 104. (NAL Call No.: 464.9 AM31R).

1011

**Efficacy of polyethyleneglycol and organic solvents for infusing fungicides into soybean seeds.**

Shortt, B.J. Sinclair, J.B. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Oct 1980. v. 70 (10). p. 971-973. ill. 15 ref. (NAL Call No.: 464.8 P56).

1012

**An efficient and objective survey method for brown stem rot (Phialophora gregata) of soybeans.**

Tachibana, H. Booth, G.D. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. *Plant disease reporter*. July 1979. v. 63 (7). p. 539-541. ill. 6 ref. (NAL Call No.: 1.9 P69P).

1013

**Electron microscope study of race-specific and age-related resistant and susceptible reactions of soybeans to Phytophthora megasperma var. sojae.**

Stossel, P. Lazarovits, G.; Ward, E.W.B. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. June 1981. v. 71 (6). p. 617-623. ill. 21 ref. (NAL Call No.: 464.8 P56).

1014

**Emergence and yield of fungicide-treated soybean seed differing in quality (Glycine max, control of soil-borne fungi, Phomopsis, cultivars, Iowa).**

Wall, M.T. AGJDA. McGee, D.C.; Burris, J.S. Madison: American Society of Agronomy. *Agronomy journal*. Nov/Dec 1983. v. 75 (6). p. 969-973. Includes references. (NAL Call No.: 4 AM34P).

1015

**Environmental factors influencing growth and sporulation of Cercospora kikuchii (Purple stain disease of soybean).**

Chen, M.D. Lyda, S.D.; Halliwell, R.S. Bronx, N.Y., The New York Botanical Garden. *Mycologia*. Nov/Dec 1979. v. 71 (6). p. 1150-1157. ill. 11 ref. (NAL Call No.: 450 M99).

1016

**Enzyme induction in soybean infected by Phytophthora megasperma f. sp. glycinea (Glycine max).**

Borner, H. Grisebach, H. New York: Academic Press. *Archives of biochemistry and biophysics*. Aug 1982. v. 217 (1). p. 65-71. 23 ref. (NAL

Call No.: 381 AR2).

1017

**Epidemiology of Phomopsis seed decay of soybean in Illinois.**

Shortt, B.U. Grybauskas, A.P.; Tenne, F.D.; Sinclair, J.B. St. Paul, Minn., American Phytopathological Society. Plant disease. Jan 1981. v. 65 (1). p. 62-64. maps. 10 ref. (NAL Call No.: 1.9 P69P).

1018

**Etiology and epidemiology of seeding rot of soybean by *Pythium ultimum*.**

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1019

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**Host-pathogen interactions. XV. Fungal glucans which elicit phytoalexin accumulation in soybean also elicit the accumulation of phytoalexins in other plants (*Phytophthora megasperma soja*, *Colletotrichum lindemuthianum*, kidney beans, potatoes).**  
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1118

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**Parasitic and mutualistic associations between a mycorrhizal fungus and soybean: development of the host plant.** Bethlenfalvay, G.J. Brown, M.S.; Pacovsky, R.S. St. Paul, American Phytopathological Society. *Phytopathology*. July 1982. v. 72 (7). p. 889-893. ill. 26 ref. (NAL Call No.: 464.8 P56).

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1138

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1139

**Powdery mildew on soybean in Delaware (Microsphaera diffusa, Fungi).**  
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1140

### **Predictive systems for scheduling foliar fungicides on soybeans.**

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1141

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### **Prescribed resistant cultivars for controlling brown stem rot of soybean and managing resistance genes (*Phialophora gregata*).**

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1143

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### **Production of conidia by *Cercospora kikuchii* in culture (Soybean breeding for resistance).**

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1145

### **Quality losses in *Phomopsis* (sojae)-infected soybean seeds (Pod and stem blight).**

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1149

### **Races of *Phytophthora megasperma* f. sp. *glycinea* in Wisconsin (Root and stem rot of soybean).**

Tooley, P.W. Grau, C.R.; Stough, M.C. St. Paul, Minn., American Phytopathological Society. Plant disease. June 1982. v. 66 (6). p. 472-475. Includes 23 ref. (NAL Call No.: 1.9 P69P).

1150

### **Rapid assay for systemic fungicides against *Phytophthora* (megasperma) rot of soybeans.**

Lazarovits, G. Unwin, C.H.; Ward, W.B. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1980. v. 64 (2). p. 163-165. ill. 4 ref. (NAL Call No.: 1.9 P69P).

1151

### **A receptor on soybean membranes for a fungal elicitor of phytoalexin accumulation (*Glycine max*, *Phytophthora palmivora*, *Phytophthora megasperma* f. sp. *glycinea*, *Phytophthora cinnamomi*).**

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1152

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1153

**Relationship among Cercospora kikuchii, other seed mycoflora, and germination of soybeans in Puerto Rico and Illinois.** Hepperly, P.R. Sinclair, J.B. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1981. v. 65 (2). p. 130-132. 12 ref. (NAL Call No.: 1.9 P69P).

1154

**Relationship between brown spot (Septoria glycines) severities and yield losses in soybeans.** Lim, S.M. St. Paul, American Phytopathological Society. Phytopathology. May 1979. v. 69 (5). p. 540-541. (NAL Call No.: 464.8 P56).

1155

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1156

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1157

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1158

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1159

**Resistance evaluation and inheritance of a nonchlorotic response to brown spot (Septoria glycines) of soybean.** Young, L.D. Ross, J.P. Madison, Crop Science Society of America. Crop science. Nov/Dec 1978. v. 18 (6). p. 1075-1077. ill. 8 ref. (NAL Call No.: 64.8 C883).

1160

**Resistance of soybean cultivars to Sclerotinia sclerotiorum.** Grau, C.R. Radke, V.L.; Gillespie, F.L. St. Paul, Minn., American Phytopathological Society. Plant disease. June 1982. v. 66 (6). p. 506-508. ill. Includes 15 ref. (NAL Call No.: 1.9 P69P).

1161

**Resistance to soybean rust (Phakopsora pachyrhizi) and mode of inheritance.** Bromfield, K.R. AR-NE-AR-SO. Hartwig, E.E. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1980. v. 20 (2). p. 254-255. ill. 9 ref. (NAL Call No.: 64.8 C883).

1162

**Response of soybean strains to artificial inoculation with Nematospora coryli (Yeast spot disease).** Keeling, B.L. Hartwig, E.E.; Jackson, E.L. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1981. v. 21 (1). p. 73-75. 7 ref. (NAL Call No.: 64.8 C883).

1163

**Response of soybeans and soybean pathogens to soil fumigation and foliar fungicide sprays.** Kittle, D.R. Gray, L.E. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1982. v. 66 c (3). p. 213-215. Includes 20 ref. (NAL Call No.: 1.9 P69P).

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1164

**Responses to Septoria glycines of soybeans nearly isogenic except for seed color (Glycine max, brown spot).**

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1169

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Phipps, P.M. Porter, D.M. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1982. v. 66 (2). p. 163-165. Includes 10 ref. (NAL Call No.: 1.9 P69P).

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1181

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1182

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1183

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1184

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1186

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1191

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1192

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Walters, H.J. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1980. v. 64 (10). p. 961-962. ill. 13 ref. (NAL Call No.: 1.9 P69P).

1193

**Soybean rust: some considerations relevant to threat analysis (Phakopsora pachyrhizi).**  
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1194

**Soybean seed and soil fungicide evaluation with no-till and conventional plow-plant systems, 1980 (Soybean (Glycine max 'McCurdy ML3'), pre- and postemergence damping-off, various seed and soil-borne organisms).**  
Shokes, F.M. Sprenkel, R.K.; Wright, D.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 164. (NAL Call No.: 464.9 AM31R).

1195

**Soybean seed decay: sources of inoculum and nature of infection (Phomopsis sp. and Diaporthe spp., spread of soybean plant populations).**  
Kmetz, K.T. Ellett, C.W. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1979. Aug 1979. . 69 (8). p. 798-801. ill. 14 ref. (NAL Call No.: 464.8 P56).

1196

**Soybean seed lot contamination by Melanopsichium pennsylvanicum smut galls (Comparison with Melanopsichium missouriense).**  
Schiller, C.T. Sinclair, J.B. St. Paul, American Phytopathological Society. Phytopathology. June 1979. v. 69 (6). p. 605-608. ill. 7 ref. (NAL Call No.: 464.8 P56).

1197

**Soybean seed quality losses associated with bean leaf beetles and Alternaria tenuissima (Glycine max, Cerotoma trifurcata).**  
Shortt, B.J. Sinclair, J.B.; Helm, C.G.; Jeffords, M.R.; Kogan, M. St. Paul, American Phytopathological Society. Phytopathology. June 1982. v. 72 (6). p. 615-618. ill. 11 ref. (NAL Call No.: 464.8 P56).

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Sullivan, G.A. n.p., The Association. News letter. Association of Official Seed Analysts. May 1979. v. 53 (2). p. 40-41. ill. (NAL Call No.: 61.9 AS7N).

1199

**Soybean seed treatments, 1981 (Soybean (Glycine max 'Amsoy 71'), pre- and postemergence damping-off; Phomopsis sp., seed- and soil-borne microorganisms).**

Mueller, J.D. Manandhar, J.B.; Bisht, V.S.; Sinclair, J.B. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 173. (NAL Call No.: 464.9 AM31R).

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**Soybean seed treatments, 1982 (Fungicides used for pre- and postemergence damping off, seed and soilborne microorganisms, Glycine max).**

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1201

**Soybean stem canker, a major disease in 1981 (caused by the fungus Diaporthe phaseolorum, Tennessee).**

Hilty, J.W.TFHS. Knoxville: The Station. Tennessee farm and home science - Tennessee Agricultural Experiment Station. Oct/Dec 1981. Oct/Dec 1981. (120). p. 16-17. ill. (NAL Call No.: 100 T25F).

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**Soybean stem canker: a serious disease in Alabama (Diaporthe phaseolorum).**

Backman, P.A. Crawford, M.A.; White, J. Auburn, The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Winter 1981. v. 28 (4). p. 6. ill. (NAL Call No.: 100 AL1H).

1203

**Soybean varieties: fungicide seed treatments, foliar fungicides, nematicides.**

Schmitt, D.P. Ross, J.P. Raleigh, N.C., The Service. AG - North Carolina State University, Agricultural Extension Service. Aug 1980. Aug 1980. (218, suppl.). 4 p. (NAL Call No.: S544.3.N6N62).

1204

**Stem canker: a soybean disease recently found in Louisiana (Diaporthe phaseolorum var. caulivora, symptoms).**

Snow, J.P. Berggeren, G.T.; Harville, B.G.; Whitman, H.K. Baton Rouge, La.: The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Spring 1984. v. 27 (3). p. 8-9, 24. ill., maps. (NAL Call No.: 100 L939).

1205

**Stimulation of oospore production in Phytophthora megasperma f. sp. medicaginis by medicarpin (Medicago sativa, alfalfa, Canavalia ensiformis, jack beans, Glycine max, soybeans).** Vaziri, A.PHYTA. Keen, N.T.; Erwin, D.C. St. Paul: American Phytopathological Society. Phytopathology. May 1983. v. 73 (5). p. 730-734. Includes references. (NAL Call No.: 464.8 P56).

1206

**Storage and use of Phytophthora megasperma var. sojae oospores as inoculum (causes of root and stem rot in soybeans).**

Kittle, D.R. Gray, L.E. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1979. Aug 1979. . 69 (8). p. 821-823. ill. 19 ref. (NAL Call No.: 464.8 P56).

1207

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Tan, Y.J.ISSODB. Yu, Z.L.; Liu, J.L. Urbana: International Agricultural Publications, College of Agriculture, University of Illinois. INTSOY International Soybean Program series. July 1983. July 1983. (25). p. 169-174. Includes references. (NAL Call No.: TX558.S715).

1208

**Suppression of anthracnose of soybeans by calcium (Caused by Colletotrichum dematium).**

Muchovej, J.U. Muchovej, R.M.C.; Dhingra, O.D.; Maffia, L.A. St. Paul, Minn., American Phytopathological Society. Plant disease. Dec 1980. v. 64 (12). p. 1088-1089. ill. 12 ref. (NAL Call No.: 1.9 P69P).

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1209

**Surface disinfection of soybean seeds for selective recovery of seedborne microorganisms (*Phomopsis sojae*, *Bacillus subtilis*, *Cercospora kikuchii*, *Cercospora sojae*).**

Grybauskas, A.P. Sinclair, J.B. Beltsville, Md., The Administration. Plant disease reporter. United States. Dept. of Agriculture. Science and Education Administration. Oct 1979. v. 63 (10). p. 887-891. ill. 4 ref. (NAL Call No.: 1.9 P69P).

1210

**Survival of *Macrophomina phaseolina* in soil and in residue of soybean (Charcoal rot, Missouri).**

Short, G.E. Wylie, T.D.; Bristow, P.R. St. Paul, Minn., American Phytopathological Society. Phytopathology. Jan 1980. v. 70 (1). p. 13-17. ill. 21 ref. (NAL Call No.: 464.8 P56).

1211

**Systemic fungicides for controlling *Phytophthora (megasperma sojae)* root rot and damping-off of soybean.**

Papavizas, G.C. Schwenk, F.W. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Aug 1979. v. 63 (8). p. 708-712. ill. 16 ref. (NAL Call No.: 1.9 P69P).

1212

**Systemicity and fungicidal activity of three systemic fungicides in soybean / by Poorna Nand Thapliyal.**

Thapliyal, Poorna Nand, 1970. Thesis (Ph.D.)--University of Illinois, 1970. Photocopy. Ann Arbor, Mich.: University Microfilms, 1971. ix, 51 leaves; 21 cm. Bibliography: leaves 46-48. (NAL Call No.: DISS 71-14,967).

1213

**Systemicity of <sup>14</sup>C-labeled chloroneb in soybean tissues / by Prem Dutt Kharbanda.**

Kharbanda, Prem Dutt, 1940. 1971. Thesis (Ph.D.)--University of Illinois, Urbana-Champaign, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. vii, 46 leaves; 21 cm. Bibliography: leaves 41-44. (NAL Call No.: DISS 72-6,976).

1214

**Temperature-induced changes in specificity in the interaction of soybeans with *Phytophthora megasperma* f. sp. *glycinea*.**

Ward, E.W.B. Lazarovits, G. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 826-830. 29 ref. (NAL Call No.: 464.8 P56).

1215

**Tests during storage of *Phomopsis sojae*-infected soybean seeds from benomyl-treated field plots.**

Schoen, J.F. n.p., The Association. The News letter of the Association of Official Seed Analysts. May 1980. v. 54 (2). p. 50-53. 5 ref. (NAL Call No.: 61.9 AS7N).

1216

**Tests on *Phomopsis*-infected soybean seed under controlled storage conditions.**

Schoen, J.F. Schlub, P. (s.l.), The Association. The News letter of the Association of Official Seed Analysts. Sept 1980. v. 54 (3). p. 78-79. 2 ref. (NAL Call No.: 61.9 AS7N).

1217

**Thermotherapy of soybean seeds to control seedborne fungi (*Phomopsis* spp.).**

Zinnen, T.M. Sinclair, J.B. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 831-834. 10 ref. (NAL Call No.: 464.8 P56).

1218

**Top dieback of soybean caused by *Diaporthe phaseolorum* var. *caulivora*.**

Hobbs, T.W. Schmitthenner, A.F.; Ellett, C.W.; Hite, R.E. St. Paul, Minn., American Phytopathological Society. Plant disease. July 1981. v. 65 (7). p. 618-620. ill. Includes 17 ref. (NAL Call No.: 1.9 P69P).

1219

**Treating soybean seed to control soil-borne seedling disease, 1979 (*Glycine max* 'Pomona', 'Forest' and 'Cumberland'), pre- and postemergence damping-off, various soil-borne microorganisms).**

Crowe, F.J. Sanden, G.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 191. (NAL Call No.: 464.9 AM31R).

1220

Treatment of soybean seed with Ridomil and Captan for control of *Phytophthora megasperma* f.sp. *glycinea*, 1981 (Soybean (*Glycine max* 'Amsoy', 'Amsoy 71', 'Corsoy', 'Corsoy 79', 'Harcor', 'Marshall', 'Pike', 'Pike II', 'Pride B216', 'Steele', 'A78-125029', 'A78-227013', 'A78-227015', 'A78-227016'), pre- and postemergence damping-off and root rot; *Phytophthora megasperma* f.sp. *glycinea*). Hatfield, J.D. Tachibana, H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 171-173. (NAL Call No.: 464.9 AM31R).

1221

Trifluralin enhancement of *Phytophthora* (*megasperma sojae*) root rot of soybean (Herbicides). Duncan, D.R. Paxton, J.D. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1981. v. 65 (5). p. 435-436. 12 ref. (NAL Call No.: 1.9 P69P).

1222

Twin-stem abnormality disease of soybean seedlings caused by *Sclerotium* sp. Dhingra, O.D. Muchovej, J.U. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1980. v. 64 (2). p. 176-178. ill. 1 ref. (NAL Call No.: 1.9 P69P).

1223

Two genes for resistance to race 5 of *Cercospora sojae* in soybeans (Frogeye leafspot, *Glycine max*). Phillips, D.V. Boerma, H.R. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 764-766. 9 ref. (NAL Call No.: 464.8 P56).

1224

Use of paraquat to aid detection of fungi (*Diaporthe phaseolorum*) in soybean tissues. Cerkauskas, R.F. Sinclair, J.B. St. Paul, Minn., American Phytopathological Society. Phytopathology. Nov 1980. v. 70 (11). p. 1036-1038. 16 ref. (NAL Call No.: 464.8 P56).

1225

Variation among isolates of *Colletotrichum dematium* var. *truncata* from soybean and three *Colletotrichum* spp. to benomyl. Rodriguez-Marcano, A. Sinclair, J.B. Rio Piedras, The Station. The Journal of agriculture of the University of Puerto Rico - Puerto Rico, Agricultural Experiment Station.

Jan 1982. v. 66 (1). p. 35-43. ill. Includes 14 ref. (NAL Call No.: 8 P832J).

1226

Virulence and aggressiveness of *Phakopsora pachyrhizi* isolates causing soybean rust. Bromfield, K.R. AR-NE. Melching, J.S.; Kingsolver, C.H. St. Paul, Minn., American Phytopathological Society. Phytopathology. Jan 1980. v. 70 (1). p. 17-21. ill. 10 ref. (NAL Call No.: 464.8 P56).

1227

White mold of beans.

Hart, L. Patrick. Saettler, A. W. Document available from: Michigan State University, Bulletin Office, P.O.Box 231, East Lansing, Michigan 48824 1981. Discusses this pathogen; it's life cycle; symptoms; environmental factors; and control. 4 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: EB E-892).

1228

Whoops!! Incorrect results caused by fungus (*Fusarium*, *Alternaria*, soybeans). Glenn, B. Jr. Hansen, B.F. n.p. News letter Association of Official Seed Analysts. Feb 1979. v. 53 (1). p. 33-34. (NAL Call No.: 61.9 AS7N).

1229

Widely virulent isolates of *Phytophthora megasperma* f. sp. *glycinea* causing root and stem rot of soybeans in New York (Multirace-resistant cultivar). Tooley, P.W. Bergstrom, G.C.; Wright, M.J. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1984. v. 68 (8). p. 726-727. Includes 12 references. (NAL Call No.: 1.9 P69P).

1230

Yield losses in soybeans from anthracnose caused by *Colletotrichum truncatum* (*Glycine max*, cultivars, southeastern United States). Backman, P.A. Williams, J.C.; Crawford, M.A. St. Paul, American Phytopathological Society. Plant disease. Nov 1982. v. 66 (11). p. 1032-1034. ill. 9 ref. (NAL Call No.: 1.9 P69P).

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**1231**

**Yield losses in soybeans induced by powdery mildew (*Microsphaera diffusa*).**

Dunleavy, J.M. AR-NC. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1980. v. 64 (3). p. 291-292. ill. 8 ref. (NAL Call No.: 1.9 P69P).

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1232

**Association of volatile aldehyde production during germination with poor soybean and pea seed quality (Soilborne fungi and bacteria, vigor and viability).**

Harman, G.E. Nedrow, B.L.; Clark, B.E.; Mattick, L.R. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1982. v. 22 (4). p. 712-716. ill. 19 ref. (NAL Call No.: 64.8 C883).

1233

**Bacteria-free soybean plants / by Jerry Fred Strissel.**

Strissel, Jerry Fred, 1942. 1970. Thesis (Ph.D.)--Iowa State University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. iv, 85 leaves : ill. ; 21 cm. Bibliography: leaves 76-84. (NAL Call No.: DISS 71-7,333).

1234

**Bacterial tan spot, a new foliar disease of soybeans (*Corynebacterium flaccumfaciens*).**

Dunleavy, J.M. CRPSA. Madison : Crop Science Society of America. Crop science. May/June 1983. v. 23 (3). p. 473-476. ill., maps. Includes references. (NAL Call No.: 64.8 C883).

1235

**Effect of light on bacteria (*Erwinia amylovora*)-induced hypersensitivity in soybean.**

Giddix, L.R. Jr. Lukezic, F.L.; Pell, E.J. St. Paul, Minn., American Phytopathological Society. Phytopathology. Feb 1981. v. 71 (2). p. 111-115. ill. 38 ref. (NAL Call No.: 464.8 P56).

1236

**Effects of sulfur dioxide on expansion of lesions caused by *Corynebacterium nebraskense* in maize and by *Xanthomonas phaseoli* var. *sojensis* in soybean (Air pollution injuries).**

Laurence, J.A. Aluisio, A.L. St. Paul, Minn., American Phytopathological Society. Phytopathology. Apr 1981. v. 71 (4). p. 445-448. 11 ref. (NAL Call No.: 464.8 P56).

1237

**Fungicide evaluation for control of foliar, pod and stem diseases of soybeans, 1979 (Soybean (Glycine max, 'Crawford', 'Essex', 'Cumberland'), foliar, pod and stem diseases, brown spot; *Septoria glycines*, downy mildew; *Peonospora manshurica*, bacterial blight; *Pseudomonas glycinea*, bacterial pustule; *Xanthomonas phaseoli*).**

Crowe, F.J. Sanden, G.E. (s.l.), The Society.

Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 94-95. (NAL Call No.: 464.9 AM31R).

1238

**Host-pathogen interactions. XVIII. Isolation and biological activity of glycinol, a pterocarpin phytoalexin synthesized by soybeans.**

Weinstein, L.I. Hahn, M.G.; Albersheim, P. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Aug 1981. v. 68 (2). p. 358-363. ill. 24 ref. (NAL Call No.: 450 P692).

1239

**Host-pathogen interactions. XXII. A galacturonic acid oligosaccharide from plant cell walls elicits phytoalexins (*Glycine max*, soybeans, *Colletotrichum lindemuthianum*, *Erwinia carotovora*).**

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1241

**Inhibition of bacteria by the soybean isoflavonoids glyceollin and coumestrol (*Pseudomonas syringae*, *Xanthomonas campestris*).**

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1242

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1243

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1244

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1245

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1248

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1249

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1250

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1251

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1252

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1257

**Soybeans susceptible to tan spot (*Erwinia herbicola*).**

Pierce, R.G. Washington, Science and Education Administration, U.S. Dept. of Agriculture. Agricultural research. Apr 1979. v. 27 (10). p. 7. (NAL Call No.: 1.98 AG84).

1258

**Specific elicitors of glyceollin accumulation in the *Pseudomonas glycinea*-soybean host-parasite system.**

Bruegger, B.B. Keen, N.T. London, Academic. Physiological plant pathology. July 1979. v. 15 (1). p. 43-51. ill. 29 ref. (NAL Call No.: SB599.P45).

1259

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1260

**Studies on natural occurrence of plant pathogenic fluorescent pseudomonads in the phyllosphere of soybean.**

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1261

**A study of distribution and sampling of soybean plants naturally infected with *Pseudomonas syringae* pv. *glycinea* (Bacterial blight, *Glycine max*).**

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1262

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1263

**Bean pod mottle disease in soybeans in Mississippi (Cerotoma trifurcata, vector).**  
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1264

**Bean pod mottle virus and cowpea mosaic virus in Louisiana soybeans / by Kenneth Cosmas Gremillion.**  
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1265

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1267

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Dhingra, K.L. Chenulu, V.V. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 103. (NAL Call No.: 464.9 AM31R).

1268

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Call No.: QH585.A1I58).

1269

**Detection of pathogenic strains of soybean mosaic virus by enzyme-linked immunosorbent assay with polystyrene plates and beads as the solid phase (Glycine max).**  
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1270

**Detection of seedborne plant viruses using serologically specific electron microscopy (Tobacco ringspot virus, barley stripe mosaic virus, lettuce mosaic virus, soybean mosaic virus).**  
Brlansky, R.H. Derrick, K.S. St. Paul, American Phytopathological Society. Phytopathology. Jan 1979. v. 69 (1). p. 96-100. ill. 14 ref. (NAL Call No.: 464.8 P56).

1271

**Detection of soybean mosaic virus in seed by solid-phase radioimmunoassay.**  
Bryant, G.R. Hill, J.H.; Bailey, T.B.; Tachibana, H.; Durand, D.P.; Benner, H.I. St. Paul, American Phytopathological Society. Plant disease. Aug 1982. v. 66 (8). p. 693-695. 15 ref. (NAL Call No.: 1.9 P69P).

1272

**Development of a solid-phase radioimmunoassay for detection of soybean mosaic virus (Glycine max).**  
Bryant, G.R. PHYTA. Durand, D.P.; Hill, J.H. St. Paul : American Phytopathological Society. Phytopathology. Apr 1983. v. 73 (4). p. 623-629. Includes references. (NAL Call No.: 464.8 P56).

1273

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1274

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Hammond, R.B. Pedigo, L.P. Lawrence : The Society. Journal of the Kansas Entomological Society. Oct 1982. v. 55 (4). p. 754-758. 4 ref. (NAL Call No.: 420 K13).

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**Dynamics of aphid transmission of soybean mosaic virus.**  
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1276

**Effect of bean pod mottle virus and soybean mosaic virus on nitrogen fixation in soybeans (Glycine max).**  
Hicks, P.M. PLAAA. Bollich, P.K.; Dunigan, E.P.; Harville, B.G.; Mitchell, P. (s.l.) : The Academy. The proceedings of the Louisiana Academy of Sciences. 1983. v. 46. p. 106-108. Includes references. (NAL Call No.: 500 L932).

1277

**Effect of soybean mosaic virus on root volume and dry weight of soybean plants.**  
Keeling, B.L. Madison, Wis., Crop Science Society of America. Crop science. May/June 1982. v. 22 (3). p. 629-630. 10 ref. (NAL Call No.: 64.8 C883).

1278

**Effect of soybean yellow mosaic on growth and yield of soybean (Glycine max).**  
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1279

**Effects of antiviral compounds on symptoms and infectivity of cowpea chlorotic mottle virus (Vigna unguiculata, Glycine max, 2-thiouracil, ribavirin, amantadine, formycin, methisazone, methyl bromide with chloropicrin).**  
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1280

**Enhancement by soybean mosaic virus of bean pod mottle virus titer in doubly infected soybean (Glycine max).**  
Calvert, L.A. PHYTA. Ghabrial, S.A. St. Paul : American Phytopathological Society. Phytopathology. July 1983. v. 73 (7). p. 992-997. Includes references. (NAL Call No.: 464.8 P56).

1281

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Cho, E.K. CRPSA. Goodman, R.M. Madison : Crop Science Society of America. Crop science. Nov/Dec 1982. v. 22 (6). p. 1133-1136. 16 ref. (NAL Call No.: 64.8 C883).

1282

**Evaluation of virus contents in soybean by enzyme-linked immunosorbent assay.**  
Moore, D.L. Lister, R.M.; Abney, T.S.; Athow, K.L. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1982. v. 66 (9). p. 790-793. 8 ref. (NAL Call No.: 1.9 P69P).

1283

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Hill, J.H. Lucas, B.S.; Benner, H.I.; Tachibana, H.; Hammond, R.B.; Pedigo, L.P. St. Paul, Minn., American Phytopathological Society. Phytopathology. June 1980. v. 70 (6). p. 536-540. 29 ref. (NAL Call No.: 464.8 P56).

1284

**Identification and varietal response of soybeans to soybean mosaic virus and tobacco ringspot virus / by John Patterson Kay.**  
Kay, John Patterson, 1944. 1971. Thesis (Ph.D.)--Louisiana State University and Agricultural and Mechanical College, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1972. viii, 46 leaves ; 21 cm. Bibliography: leaves 42-45. (NAL Call No.: DISS 72-3,501).

1285

**Identification of soybean germplasm lines and cultivars with low incidence of soybean mosaic virus transmission through seed.**  
Goodman, R.M. Bowers, G.R. Jr. Madison, Crop Science Society of America. Crop science. Mar/Apr 1979. v. 19 (2). p. 264-267. ill. 25 ref. (NAL Call No.: 64.8 C883).

## (PLANT DISEASES - VIRAL)

1286

**Immunochemical and microscopical techniques for detecting blackeye cowpea mosaic and soybean mosaic viruses in hypocotyls of germinated seeds.**

Lima, J.A.A. Purcifull, D.E. St. Paul, Minn., American Phytopathological Society. Phytopathology. Feb 1980. v. 70 (2). p. 142-147. ill. 29 ref. (NAL Call No.: 464.8 P56).

1287

**Increased incidence of *Phomopsis* sp. in seeds from soybeans infected with bean pod mottle virus (*Glycine max*, *Phomopsis sojae*).**

Stuckey, R.E. Ghabrial, S.A.; Reicosky, D.A. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1982. v. 66 (9). p. 826-829. 16 ref. (NAL Call No.: 1.9 P69P).

1288

**Inheritance of reaction to soybean mosaic virus in soybeans (*Cultivars*).**

Kiihl, R.A.S. Hartwig, E.E. Madison, Crop Science Society of America. Crop science. May/June 1979. v. 19 (3). p. 372-375. ill. 9 ref. (NAL Call No.: 64.8 C883).

1289

**Inheritance of resistance to soybean mosaic virus in *Phaseolus vulgaris*.**

Providenti, R. Gonsalves, D.; Ranalli, P. Washington, D.C., American Genetic Association. The Journal of heredity. July/Aug 1982. v. 73 (4). p. 302-303. 14 ref. (NAL Call No.: 442.8 AM3).

1290

**Inheritance of resistance to yellow mosaic in soybean.**

Singh, B.B. Malick, A.S. New Delhi, Indian Society of Genetics & Plant Breeding. Indian journal of genetics & plant breeding. July 1978. v. 38 (2). p. 258-261. ill. 2 ref. (NAL Call No.: 64.8 IN2).

1291

**Isolation and beetle transmission of cowpea mosaic virus (severe subgroup) from *Desmodium canescens* and soybeans in Illinois (Insect vectors).**

McLaughlin, M.R. Thongmeearkom, P. Beltsville, Md., Plant Science Research Division, Agricultural Research Service, U.S. Dept. of Agriculture. Plant disease reporter. Dec 1978. v. 62 (12). p. 1069-1073. ill. 16 ref. (NAL Call No.: 1.9 P69P).

1292

**Isolation and comparison of two strains of soybean mosaic virus.**

Hunst, P.L. Tolin, S.A. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 710-713. ill. 19 ref. (NAL Call No.: 464.8 P56).

1293

**Isolation of specific antibody to plant viruses by acid sucrose density gradient centrifugation (Southern bean mosaic (cowpea strain) and soybean mosaic viruses).**

McLaughlin, M.R. Bryant, G.R.; Hill, J.H.; Benner, H.I.; Durand, D.P. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1980. v. 70 (8). p. 831-834. ill. 11 ref. (NAL Call No.: 464.8 P56).

1294

**Machismo disease of soybeans (induced by a mycoplasma-like organism). II. Suppressive effects of tetracycline on symptom development (*Scaphytopius fuliginosus* as insect vector).**

anada, G.A. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Apr 1979. v. 63 (4). p. 309-312. ill. 11 ref. (NAL Call No.: 1.9 P69P).

1295

**Nature of the interaction of soybean mosaic virus and bean pod mottle virus in bean and soybean / by Yih-Shyong Lee.**

Lee, Yih-Shyong. 1939. 1971. Thesis (Ph.D.)--North Carolina State University, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. vi, 26 leaves; 21 cm. Bibliography: leaf 26. (NAL Call No.: DISS 72-11,988).

1296

**A new gene for peanut mottle virus resistance in soybean.**

Buss, G.R. Roane, C.W.; Tolin, S.A. Ames: The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1983. v. 10. p. 102-104. Includes references. (NAL Call No.: aSB205.5756).

1297

**New sources of resistance to seed transmission of soybean mosaic virus in soybeans.**

Bowers, G.R. Jr. Goodman, R.M. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1982. v. 22 (1). p. 155-156. Includes 11 ref. (NAL Call No.: 64.8 C883).

1298

**Non-movement of cowpea chlorotic mottle virus from cowpea and soybean (*Diabrotica undecimpunctata howardii*, insect vectors).**  
Demski, J. Chalkley, J. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Sept 1979. v. 63 (9). p. 761-764. ill. 9 ref. (NAL Call No.: 1.9 P69P).

1299

**Observations on seasonal developmental of bean leaf beetle, *Cerotoma trifurcata* (Forster) and incidence of bean pod mottle virus in Arkansas soybean.**  
Mueller, A.J. Haddox, A.W. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Oct 1980. v. 15 (4). p. 398-403. ill. 9 ref. (NAL Call No.: QL461.G4).

1300

**Plant disease detection and Minnesota crop disease problems (Maize dwarf mosaic virus, soybean cyst nematode, *Heterodera glycines*, and head scab caused by *Fusarium* spp.).**  
Stromberg, E.L. APHIS. Minneapolis, The Council. Crop production conference report - Crop Quality Council. Crop Quality Council. 1978. 1978. (45th). p. 37-40. 2 ref. (NAL Call No.: 464.9 N813).

1301

**Predisposition to seed infection by *Phomopsis sojae* in soybean plants infected by soybean mosaic virus.**  
Hepperly, P.R. Bowers, G.R. Jr. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1979. Aug 1979. . 69 (8). p. 846-848. ill. 10 ref. (NAL Call No.: 464.8 P56).

1302

**Properties of soybean mosaic virus ribonucleic acid.**  
Hill, J.H. Benner, H.I. St. Paul, Minn., American Phytopathological Society. Phytopathology. Mar 1980. v. 70 (3). p. 236-239. ill. 31 ref. (NAL Call No.: 464.8 P56).

1303

**Purification, partial characterization, and serological comparison of soybean mosaic virus and its coat protein.**  
Soong, M.M. Milbrath, G.M. St. Paul, Minn., American Phytopathological Society. Phytopathology. May 1980. v. 70 (5). p. 388-391. ill. 18 ref. (NAL Call No.: 464.8

P56).

1304

**Resistance to a necrotic strain of soybean mosaic virus in soybean.**  
Kwon, S.H. Oh, J.H. Madison, Wis., Crop Science Society of America. Crop science. May/June 1980. v. 20 (3). p. 403-404. ill. 8 ref. (NAL Call No.: 64.8 C883).

1305

**Resistance to bud blight in introductions from the germ plasm of wild soybean (*Tobacco ringspot virus*).**  
Orellana, R.G. St. Paul, Minn., American Phytopathological Society. Plant disease. July 1981. v. 65 (7). p. 594-595. Includes 12 ref. (NAL Call No.: 1.9 P69P).

1306

**Resistance to peanut mottle virus (PMV) in soybean (*Glycine max*) plant introductions.**  
Shipe, E.R. Buss, G.R. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Sept 1979. v. 63 (9). p. 757-760. ill. 11 ref. (NAL Call No.: 1.9 P69P).

1307

**A second gene for resistance to peanut mottle virus in soybeans.**  
Shipe, E.R. Buss, G.R. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 656-658. ill. 18 ref. (NAL Call No.: 64.8 C883).

1308

**Seed transmission and yield losses in tropical soybeans infected by soybean mosaic virus.**  
Goodman, R.M. Dard, J.H. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1980. v. 64 (10). p. 913-914. ill. 4 ref. (NAL Call No.: 1.9 P69P).

1309

**Serological detection of bean pod mottle virus in bean leaf beetles (*Ceratoma trifurcata*, soybeans, *Glycine max*).**  
Ghabrial, S.A. PHYTA. Schultz, F.J. St. Paul : American Phytopathological Society. Phytopathology. Mar 1983. v. 73 (3). p. 480-483. Includes references. (NAL Call No.: 464.8 P56).

## (PLANT DISEASES - VIRAL)

1310

**Some properties of an isolate of the soybean stunt strain of cucumber mosaic virus.**

Hanada, K. Tochiwara, H. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 761-764. ill. 18 ref. (NAL Call No.: 464.8 P56).

1311

**Soybean diseases (Fungal, bacterial, viral).**

Crowe, F. Manhattan, Kan., The Service. C - Kansas State University, Cooperative Extension Service. May 1982. May 1982. (449). p. 16-19. (NAL Call No.: 275.29 K13EX).

1312

**Soybean green stem caused by bean pod mottle virus.**

Schwenk, F.W. Nickell, C.D. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1980. v. 64 (9). p. 863-865. 11 ref. (NAL Call No.: 1.9 P69P).

1313

**Soybean mosaic / by Sebastian Sarceda Quiniones.**

Quiniones, Sebastian Sarceda, 1922. 1968. Thesis (Ph.D.)--Iowa State University, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. iv, 74 leaves : ill. ; 21 cm. Bibliography: leaves 72-74. (NAL Call No.: DISS 69-4,274).

1314

**Soybean mosaic virus.**

Nyvall, R.F. Hill, J.H. Pullman, Wash., The Service. EM. Washington State University. Cooperative Extension Service. July 1979. July 1979. (888). 2 p. ill. (NAL Call No.: 275.29 W27MI).

1315

**Soybean mosaic virus: infection of soybean seed parts and seed transmission.**

Bowers, G.R. Jr. Goodman, R.M. St. Paul, American Phytopathological Society. Phytopathology. June 1979. v. 69 (6). p. 569-572. ill. 26 ref. (NAL Call No.: 464.8 P56).

1316

**Soybean mosaic virus investigations with susceptible and resistant soybeans.**

Hartwig, E.E. Keeling, B.L. Madison, Crop Science Society of America. Crop science. Sept/Oct 1982. v. 22 (5). p. 955-957. 5 ref. (NAL Call No.: 64.8 C883).

1317

**Soybean mosaic virus (Vectors, epidemiology).**

Harville, B.G. Green, A. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 276. (NAL Call No.: 100 L936).

1318

**Specific effects of soybean mosaic virus on total N (nitrogen), ureide-N, and symbiotic N<sub>2</sub>-fixation activity in Glycine max and Glycine soja (Soybeans and wild annual soybeans).**

Orellana, R.G. PHYTA. Reynolds, S.L.; Van Berkum, P. St. Paul : American Phytopathological Society. Phytopathology. Aug 1983. v. 73 (8). p. 1156-1160. ill. Includes references. (NAL Call No.: 464.8 P56).

1319

**Strains of soybean mosaic virus: classification based on virulence in resistant soybean cultivars.**

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## (MISCELLANEOUS PLANT DISORDERS)

1407

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**Glyceollin: a site-specific inhibitor of electron transport in isolated soybean mitochondria (Glycine max, Zea mays, maize, autophytotoxicity).** Boydston, R. PLPHA. Paxton, J.D.; Koeppe, D.E. Rockville : American Society of Plant Physiologists. Plant physiology. May 1983. v. 72 (1). p. 151-155. Includes references. (NAL Call No.: 450 P692).

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1426

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## (MISCELLANEOUS PLANT DISORDERS)

1431

**Metolachlor and alachlor effects on membrane permeability and lipid synthesis (Herbicides, phytotoxicity, using roots of corn, soybean, cotton, cucumber, onion).**  
Mellis, J.M. Pillai, P.; Davis, D.E.; Truelove, B. Champaign, Ill., Weed Science Society of America. Weed science. July 1982. v. 30 (4). p. 399-404. ill. 27 ref. (NAL Call No.: 79.8 W41).

1432

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1433

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1442

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Board, J.E. Hall, W. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1984. v. 76 (4). p. 700-704. ill. Includes references. (NAL Call No.: 4 AM34P).

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**Productivity of field-grown soybeans exposed to acid rain and sulfur dioxide alone and in combination.**

Irving, P.M. Miller, J.E. Madison, Wis., American Society of Agronomy. Journal of environmental quality. Oct/Dec 1981. v. 10 (4). p. 473-478. Includes 31 ref. (NAL Call No.: QH540.J6).

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1448

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1449

**Residual air pollution effects on soybean seed quality.**

Howell, R.K. Rose, L.P. Jr. St. Paul, Minn., American Phytopathological Society. Plant disease. Apr 1980. v. 64 (4). p. 385-386. ill. 10 ref. (NAL Call No.: 1.9 P69P).

1450

**Response of chronically ozonated soybean plants to an acute ozone exposure (Glycine max, air pollution, phytotoxic component).**

Johnston, J.W. Jr. Heagle, A.S. St. Paul, Minn., American Phytopathological Society. Phytopathology. Apr 1982. v. 72 (4). p. 387-389. Includes 10 ref. (NAL Call No.: 464.8 P56).

1451

**Response of corn and soybeans to simulated saline aerosol drift from brackish water cooling towers.**

Mulchi, C.L. Armbruster, J.A. Madison, Wis., American Society of Agronomy. Journal of environmental quality. Oct/Dec 1981. v. 10 (4). p. 541-547. Includes 21 ref. (NAL Call No.: QH540.J6).

1452

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Armbruster, J.A. Mulchi, C.L. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1984. v. 13 (2). p. 278-282. Includes references. (NAL Call No.: QH540.J6).

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**Response of soybeans to flood irrigation (a preliminary report) (Water stress, yield effects, Louisiana).**

Griffin, J.L. Habetz, R.J.; Regan, R.P. Crowley : The Station. Annual progress report - Louisiana, Rice Experiment Station. 1982. 1982. (74th). p. 350-358. ill. Includes references. (NAL Call No.: 100 L93 (3)).

1454

**Response of soybeans to simulated acid rain in the field (Rhizobium nodulation).**

Heagle, A.S. JEVQA. Philbeck, R.B.; Brewer, P.F.; Ferrell, R.E. Madison : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1983. v. 12 (4). p. 538-543. ill. Includes references. (NAL Call No.: QH540.J6).

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1455

**Responses of selected plant species to elevated carbon dioxide in the field (Zea mays, Glycine max, Pinus taeda, Liquidambar styraciflua).**  
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1456

**Root system characteristics of two soybean isolines undergoing water stress conditions (Glycine max, Nebraska).**  
Garay, A.F.AGUOA. Wilhelm, W.W. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1983. v. 75 (6). p. 973-977. ill. Includes references. (NAL Call No.: 4 AM34P).

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**Screening of herbicidal antidotes for soybeans (Atrazine).**  
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1458

**The seed coat as a control of imbibitional chilling injury (Soybeans).**  
Tully, R.E. Musgrave, M.E.; Leopold, A.C. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1981. v. 21 (2). p. 312-317. ill. 19 ref. (NAL Call No.: 64.8 C883).

1459

**Selectivity mechanisms for foliar applications of diclofop-methyl. II. Metabolism (Studies with weeds, proso millet, soybeans and cucumber, uptake, tolerance).**  
Boldt, P.F. Putnam, A.R. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1981. v. 29 (2). p. 237-241. ill. 15 ref. (NAL Call No.: 79.8 W41).

1460

**Shrinkage of soybean roots (Glycine max, water stress effects).**  
Taylor, H.M.AGUOA. Willatt, S.T. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 818-820. ill. Includes references. (NAL Call No.: 4 AM34P).

1461

**Single and multiple trace metal excess effects on three different species (Maize, soybeans, barley on contaminated soil).**  
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1462

**Soybean cultivar Hodgson response to ozone (Pollutant, injury).**  
Pratt, G.C. Krupa, S.V. St. Paul, Minn., American Phytopathological Society. Phytopathology. Nov 1981. v. 71 (11). p. 1129-1132. 14 ref. (NAL Call No.: 464.8 P56).

1463

**Soybean plant damage and yields as affected by metribuzin and seed quality (Glycine max, Cassia obtusifolia, herbicide).**  
Gossett, B.J. Morgan, L.F.; Murphy, T.R. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 691-693. 13 ref. (NAL Call No.: 4 AM34P).

1464

**Soybean seed quality as affected by impact damage (Mechanical damage during harvesting and handling).**  
Paulsen, M.R. Nave, W.R.; Gray, L.E. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1577-1582, 1589. ill. 10 ref. (NAL Call No.: 290.9 AM32T).

1465

**Stability of soybean harvest index (within cultivars, Drought stress effects, interplant competition, Florida, New York).**  
Spaeth, S.C. Randall, H.C.; Sinclair, T.R.; Vendeland, J.S. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1984. v. 76 (3). p. 482-486. ill. Includes references. (NAL Call No.: 4 AM34P).

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**Storability of harvest-damaged soybeans.**  
Paulsen, M.R. Nave, W.R.; Mounts, T.L.; Gray, L.E. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1583-1589. ill. 16 ref. (NAL Call No.: 290.9 AM32T).

1467

**A study of soybeans and rhizobia tolerance to low phosphorus - high aluminum in acid soils (Cultivars).**

Taylor, R.W. Patel, S. Normal : The School. Annual research report - School of Agriculture. Environmental Science and Home Economics. Alabama Agricultural and Mechanical University. 1983. 1983. (12th). p. 113-120. ill. Includes references. (NAL Call No.: S537.A2A34).

1468

**Sulfur dioxide effects on yield and seed quality in field-grown soybeans.**

Sprugel, D.G. Miller, J.E.; Muller, R.N.; Smith, H.J.; Xerikos, P.B. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1980. v. 70 (12). p. 1129-1133. ill. 27 ref. (NAL Call No.: 464.8 P56).

1469

**Technetium: a toxic waste product of the nuclear fuel cycle: effects on soybean growth and development.**

Berlyn, G.P. Dhillon, S.S.; Koslow, E.E. Mar 1980. v. 4 (2). Environmental management. Mar 1980. v. 4 (2). p. 149-156. ill. 15 ref. (NAL Call No.: HC79.E5E5).

1470

**Tolerance of soybean genotypes to metribuzin (Herbicides, injury).**

Eastin, E.F. Sij, J.W.; Craigmiles, J.P. Madison, Wis., American Society of Agronomy. Agronomy journal. Jan/Feb 1980. v. 72 (1). p. 167-168. ill. 6 ref. (NAL Call No.: 4 AM34P).

1471

**Tolerance of three soybean (Glycine max) cultivars to metribuzin (Herbicides, injury).**

Barrentine, W.L. Hartwig, E.E.; Edwards, C.J. Jr.; Kilen, T.C. Champaign, Ill., Weed Science Society of America. Weed science. July 1982. v. 30 (4). p. 344-348. 10 ref. (NAL Call No.: 79.8 W41).

1472

**Translocation of 14C (carbon isotope)-glyphosate (herbicide) in soybeans (Glycine max) and johnsongrass (Sorghum halepense).**

McWhorter, C.G. AR-SD. Jordan, T.N.; Wills, G.D. Champaign, Ill., Weed Science Society of America. Weed science. Jan 1980. v. 28 (1). p. 113-118. ill. 23 ref. (NAL Call No.: 79.8 W41).

1473

**Use of nitrogen stress to demonstrate the effect of yield limiting factors on the yield response of soybean to narrow row systems (Glycine max, solid seeding, Ohio).**

Cooper, R.L. Jeffers, D.L. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 257-259. Includes references. (NAL Call No.: 4 AM34P).

1474

**Water stress effects on CO2 (carbon dioxide) assimilation, photosynthate partitioning, stomatal resistance, and nodule activity in soybean.**

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**(MISCELLANEOUS PLANT DISORDERS)**

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# PROTECTION OF PLANT PRODUCTS – GENERAL AND MISC.

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Shedd, D.T.SCAEA. Miller, S.E. Clemson : The Station. Bulletin - South Carolina Agricultural Experiment Station. July 1983. July 1983. (649). 18 p. Includes references. (NAL Call No.: 100 S08 (1)).

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Byrd, Harold Wayne, 1941. 1970. Thesis (Ph.D.)--Mississippi State University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. iv, 96 leaves ; 21 cm. Bibliography: leaves 92-96. (NAL Call No.: DISS 71-8,836).

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Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1981. This publication is a progress report in the following areas: soil moisture, corn and soybean herbicides, delayed planting of soybeans, plant populations for sunflowers, rock phosphate and superphosphate comparison, rates of N and P fertilizers, brown stem rot, tillage observations, seedbed preparations for corn and soybean, and crop variety research. 25 p. : ill. (NAL Call No.: Document available from source.)(NAL Call No.: ORC 80-29).

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Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1980. This publication is a progress report and should not be considered conclusive. The topics covered are soil moisture report, K fertilization for corn and soybeans, sunflower populations, conservation tillage, crop disease trap plots, corn herbicides, spring wheat variety demonstration, musk thistle control, grain sorghum trial, and small grain selection. 17 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: ORC 80-10).

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Selleck, G.W. Baird, D.D. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1981. v. 29 (2). p. 185-190. 7 ref. (NAL Call No.: 79.8 W41).

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Kurtz, M.E. RRMSD. Street, J.E. Mississippi State : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. May 1983. v. 8 (6). 4 p. Includes references. (NAL Call No.: S79.E37).

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Rogers, R.L. Crawford, S.H.; Retzinger, E.J. Baton Rouge, The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Spring 1981. v. 24 (3). p. 20-21. ill. (NAL Call No.: 100 L939).

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Parker, R. Champaign, Ill. Weeds today. Spring 1979. v. 10 (2). p. 16-17. ill. (NAL Call No.: SB610.W4).

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Hayes, R.M. Overton, J.R. Knoxville, Agricultural Experiment Station, University of Tennessee. Tennessee farm and home science. Progress report. Jan/Mar 1979. Jan/Mar 1979. (109). p. 2-6. ill. 5 ref. (NAL Call No.: 100 T25F).

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**Compatibility of BAS 9052 OH with acifluorfen and bentazon (*Digitaria sanguinalis*, *Panicum dichotomiflorum*, *Glycine max*, antagonism, herbicide interactions).**  
Hartzler, R.G. WEESA. Foy, C.L. Champaign : Weed Science Society of America. Weed science. Sept 1983. v. 31 (5). p. 597-599. Includes references. (NAL Call No.: 79.8 W41).

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Campbell, J.R. Penner, D. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1982. v. 30 (5). p. 458-462. 12 ref. (NAL Call No.: 79.8 W41).

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**Competition and alleloathy between soybeans and weeds (*Abutilon theophrasti*, *Setaria italica*, phytotoxins, comparisons of soybean cultivars).**  
Rose, S.J. Burnside, O.C.; Specht, J.E.; Swisher, B.A. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1984. v. 76 (4). p. 523-528. ill. Includes references. (NAL Call No.: 4 AM34P).

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**Competition of common cocklebur (*Xanthium pensylvanicum*) with soybean (*Glycine max*) (Yield reduction, weeds, in Illinois).**  
Bloomberg, J.R. Kirkpatrick, B.L.; Wax, L.M. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1982. v. 30 (5). p. 507-513. ill. 14 ref. (NAL Call No.: 79.8 W41).

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**Competition of jimsonweed with soybean (*Datura stramonium*, *Glycine max*, weeds, control, herbicide).**  
Kirkpatrick, B.L. AGJDA. Wax, L.M.; Stoller, E.W. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 833-836. ill. Includes references. (NAL Call No.: 4 AM34P).

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**Competition of three malvaceous weed species in soybeans, (*Glycine max* (L.) Merr.) / by Benny Joe Eaton.**  
Eaton, Benny Joe, 1943. 1971. Thesis (Ph.D.)--Kansas State University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. v. 68 leaves ; 21 cm. Bibliography: leaves 54-56. (NAL Call No.: DISS 71-26,607).

1539

**Competitive and allelopathic effects of sunflower (*Helianthus annuus*) (*Sorghum*, soybean, growth inhibition, growth reduction, interference, root exudates, controlled with herbicides).**  
Irons, S.M. Burnside, O.C. Champaign, Ill.,

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Weed Science Society of America. Weed science. July 1982. v. 30 (4). p. 372-377. ill. 26 ref. (NAL Call No.: 79.8 W41).

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### **Competitive control of common lambsquarters (*Chenopodium album*) in a corn-soybean intercrop.**

Moss, P.A. Hartwig, N.L. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. Northeastern Weed Science Society. 1980. v. 34. p. 21-28. ill. 12 ref. (NAL Call No.: 79.9 N814).

1541

### **Competitive effects of fall panicum on soybeans (Herbicide, alachlor, abstract only).**

Sollazzo, P.J. Ilnicki, R.D. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. Northeastern Weed Science Society. 1980. v. 34. p. 59. (NAL Call No.: 79.9 N814).

1542

### **Control and management of itchgrass (*Rottboellia exaltata*, weeds, herbicides effective in soybean fields).**

Harger, T.R. Vidrine, P.R.; Nester, P.R. Baton Rouge, La., The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Summer 1982. v. 25 (4). p. 20-21, 24. ill. (NAL Call No.: 100 L939).

1543

### **Control of annual grasses in soybeans and cotton with DOWCO 453 ME herbicide (Haloxyp-methyl).**

Hunter, J.H. DOEAA. Barton, M.J. Midland : Agricultural Products Dept., Dow Chemical Co. Down to earth. Oct 1983. v. 39 (2). p. 15-21. ill. (NAL Call No.: 381 D75).

1544

### **Control of burcucumber in corn and soybeans (*Sicyos angulatus*, weed, abstract only).**

Webb, F. Johnston, G. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. Northeastern Weed Science Society. p. 34. (NAL Call No.: 79.9 N814).

1545

### **Control of cowpea (*Vigna unguiculata*) in soybean (*Glycine max*) with acifluorfen (Herbicides evaluation, phytotoxicity, South Carolina).**

Murphy, T.R. Gossett, B.J. Champaign, Ill. : Weed Science Society of America. Weed science. July 1984. v. 32 (4). p. 427-431. Includes 19 references. (NAL Call No.: 79.8 W41).

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### **Control of ivyleaf morningglory (*Ipomoea hederacea*) in soybeans with acifluorfen.**

Parochetti, J.V. EX. Harris, T.C. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. Northeastern Weed Science Society. 1980. Abstract only. v. 34. p. 3. (NAL Call No.: 79.9 N814).

1547

### **Control of johnsongrass (*Sorghum halepense*) and volunteer corn (*Zea mays*) in soybeans (*Glycine max*).**

Dale, J.E. Champaign, Ill., Weed Science Society of America. Weed science. Nov 1981. v. 29 (6). p. 708-711. ill. 15 ref. (NAL Call No.: 79.8 W41).

1548

### **Control of johnsongrass (*Sorghum halepense*) in soybeans (*Glycine max*) with foliar applied herbicides.**

Banks, P.A. WEESA. Tripp, T.N. Champaign : Weed Science Society of America. Weed science. Sept 1983. v. 31 (5). p. 628-633. Includes references. (NAL Call No.: 79.8 W41).

1549

### **Control of quackgrass (*Agropyron repens*) in soybeans (*Glycine max*) with HOE 29152 (2-(4-(trifluoromethyl phenoxy)phenoxy)propanoate).**

Young, F.L. Wyse, D.L. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1980. v. 28 (5). p. 493-498. 13 ref. (NAL Call No.: 79.8 W41).

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### **Control of sicklepod (*Cassia obtusifolia* L.) in soybeans.**

Hovermale, C.H. Hurst, H.R. Mississippi State, The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Nov 1981. Nov 1981. (898). 5 p. Includes 1 ref. (NAL Call No.: S79.E3).

1551

**Control of sicklepod (*Cassia obtusifolia* L.) in soybeans (Weed).**  
Hovermale, C.H. Hurst, H.R. Mississippi State, The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. May 1982. v. 45 (5). p. 4-6. ill. (NAL Call No.: 100 M69MI).

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Hahn, R.R. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. Northeastern Weed Science Society. p. 57-58. (NAL Call No.: 79.9 N814).

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Hagood, E.S. Jr. Bauman, T.T.; Williams, J.L. Jr.; Schreiber, M.M. Champaign, Ill., Weed Science Society of America. Weed science. July 1981. v. 29 (4). p. 500-504. 15 ref. (NAL Call No.: 79.8 W41).

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**Growth and water use by common cocklebur (*Xanthium pensylvanicum*) and soybeans (*Glycine max*) under field conditions.**

Geddes, R.D. Scott, H.D. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1979. v. 27 (2). p. 206-212. ill. 15 ref. (NAL Call No.: 79.8 W41).

1621

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Barrentine, W.L. Reames, J.E. Auburn, Ala., The Society. Proceedings - Southern Weed Science Society. 1980. 1980. (33d). p. 341-346. ill. 10 ref. (NAL Call No.: 79.9 S08).

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McWhorter, C.G. Anderson, J.M. Champaign, Ill., Weed Science Society of America. Weed science. Jan 1979. v. 27 (1). p. 58-64. ill. 17 ref. (NAL Call No.: 79.8 W41).

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McHarry, M.J. Kapusta, G. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1979. v. 71 (6). p. 1051-1055. ill. 8 ref. (NAL Call No.: 4 AM34P).

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**Herbicides and dates of application for control and eradication of wild garlic (Allium vineale) (Glycine max, Festuca arundinacea, Poa pratense).**

Peters, E.J. McKelvey, R.A. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1982. v. 30 (5). p. 557-560. 7 ref. (NAL Call No.: 79.8 W41).

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**Herbicides for controlling a mixed population of johnsongrass and common cocklebur in soybeans (Sorghum halepense, Xanthium pennsylvanicum, Mississippi).**

Mississippi State : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Nov 1982. v. 45 (11). p. 1-4. ill. 4 ref. (NAL Call No.: 100 M69MI).

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Arnold, B.L. MAEBB. Hurst, H.R. Mississippi State : The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Aug 1982. Aug 1982. (906). 6 p. ill. 4 ref. (NAL Call No.: S79.E3).

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Hardwick, C. St. Louis, Mo., American Soybean Association. Soybean digest. May/June 1979. v. 39 (7). p. 14-15. ill. (NAL Call No.: 60.38 S09).

1631

**Increasing herbicide (atrazine, metribuzin) tolerance of soybeans (Glycine max) by increasing seeding rates (Phytotoxicity).**

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Wax, L.M. Champaign, Ill., Weeds Today, Inc. Weeds today. Spring 1981. v. 12 (1). p. 4-5. ill. (NAL Call No.: SB610.W4).

1743

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Dowler, C.C. AR-SO. Auburn, Ala., The Society. Proceedings - Southern Weed Science Society. 1980. 1980. (33d). p. 48. ill. (NAL Call No.: 79.9 S08).

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**Weed watch--wild poinsettia (*Euphorbia heterophylla*, soybeans).**

Nester, P.R. Harger, T.R. Champaign, Ill. Weeds today. Spring 1979. v. 10 (2). p. 24-25. ill. (NAL Call No.: SB610.W4).

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**Whip weeds in no-till soybeans (Control).**

Ehmke, V. St. Louis, Mo., American Soybean Association. Soybean digest. Apr 1981. v. 41 (6). p. 26-27. ill. (NAL Call No.: 60.38 S09).

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**Wick-applied glyphosate reduces johnsongrass population (*Sorghum halepense* in soybeans).**

Dale, J.E. Auburn, Ala., The Society. Proceedings - Southern Weed Science Society. 1981. 1981. (34th). p. 297-299. Includes 1 ref. (NAL Call No.: 79.9 S08).

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Berglund, Duane Raymond, 1942. 1971. Thesis (Ph.D.)--North Dakota State University, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. vii, 70 leaves ; 21 cm. Bibliography: leaves (66)-70. (NAL Call No.: DISS 72-16,026).

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Rathmann, D.P. Miller, S.D. Champaign, Ill., Weed Science Society of America. Weed science. July 1981. v. 29 (4). p. 410-414. 18 ref. (NAL Call No.: 79.8 W41).

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Harger, T.R. LA. Nester, P.R. Baton Rouge, The Station. Louisiana agriculture. Louisiana. Agricultural Experiment Station. Spring 1980. v. 23 (3). p. 4-5, 7. ill. (NAL Call No.: 100 L939).

1763

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McNevin, G.R. Harvey, R.G. Champaign, Ill., Weed Science Society of America. Weed science. July 1982. v. 30 (4). p. 365-368. 13 ref. (NAL Call No.: 79.8 W41).

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Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Apr 1984. Apr 1984. p. 12. ill. (NAL Call No.: S604.N6).

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Banks, P.A. WEESA. Champaign : Weed Science Society of America. Weed science. May 1983. v. 31 (3). p. 419-422. Includes references. (NAL Call No.: 79.8 W41).

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McKibben, G.E. IL. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC - Dixon Springs Agricultural Center. Jan 1980. Jan 1980. (8). p. 66-76. 1 ref. (NAL Call No.: S1.D5).

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McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC. Dixon Springs Agricultural Center. Jan 1979. Jan 1979. (7). p. 61-70. ill. 1 ref. (NAL Call No.: S1.D5).

1768

**138 no-till tank mixes compared (Maize, soybeans, herbicide trials).**

Lessiter, F. Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Mar 1984. v. 13 (3). p. 12. ill. (NAL Call No.: S604.N6).

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**Absorption, translocation, and degradation of SN 533 by soybeans (*Glycine max*) and peanuts (*Arachis hypogaea*) (Herbicide, phytotoxicity).** Harrison, H.F. Jr. WEESA. Slife, F.W. Champaign : Weed Science Society of America. Weed science. Mar 1983. v. 31 (2). p. 259-263. ill. Includes references. (NAL Call No.: 79.8 W41).

1770

**Absorption, translocation, and metabolism of 4-(2,4-dichlorophenoxy) butyric acid in soybean and cocklebur / by Srisurang Wathana.** Wathana, Srisurang, 1936. 1970. Thesis (Ph.D)--North Carolina State University. Raleigh, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. viii, 108 leaves ; 21 cm. Bibliography: leaves 103-108. (NAL Call No.: DISS 71-15,945).

1771

**Annual progress report-1980 / Iowa State University.** Document available from: Iowa State University. Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1981. This publication discusses the research center experiments on tiling methods, time of planting corn, S and Zn fertilizers, fuel and time requirements for tillage system, organic and chemical farming, soybean bacterial tan spot loss, and pasture nutrient losses. Herbicide evaluation and crop variety tests are included. 19 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: ORC 80-13).

1772

**Antagonism with glyphosate and residual herbicide combinations (Used for control of perennial weeds and vegetation minimum-till cropping systems, maize, soybeans).** Selleck, G.W. Baird, D.D. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1981. v. 29 (2). p. 185-190. 7 ref. (NAL Call No.: 79.8 W41).

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**Atrazine persistence in a corn-soybean doublecropping system (Herbicide residue).** Brecke, B.J. Currey, W.L.; Teem, D.H. Madison, Wis., American Society of Agronomy. Agronomy journal. May/June 1981. v. 73 (3). p. 534-537. ill. 10 ref. (NAL Call No.: 4 AM34P).

1774

**Behavior of BAS-9052 OH in soybean (*Glycine max*) and johnsongrass (*Sorghum halepense*) plant and cell cultures (Herbicide metabolism, mode of action).** Swisher, B.A. Corbin, F.T. Champaign : Weed Science Society of America. Weed science. Nov 1982. v. 30 (6). p. 640-650. ill. 21 ref. (NAL Call No.: 79.8 W41).

1775

**Bioactivity of the postemergent herbicides acifluorfen and bentazon on *Geocoris punctipes* (Say) (Hemiptera: Lygaeidae) (*Glycine max*).** Farlow, R.A. Pitre, H.N. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1983. v. 76 (1). p. 200-203. Includes references. (NAL Call No.: 421 J822).

1776

**Biological properties of amino acid conjugates of (the herbicide) 2,4,5-trichlorophenoxyacetic acid (Effect on soybean root tissue, oat coleoptiles).** Davidonis, G.H. Arjmand, M. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. July 1979. v. 36 (1). p. 1086-1088. ill. 8 ref. (NAL Call No.: 381 J8223).

1777

**Biological properties of D-amino acid conjugates of 2,4-D (2,4-dichlorophenoxyacetic acid, *Glycine max*, soybeans, *Avena sativa*, oats, herbicides).** Davidonis, G.H. Hamilton, R.H.; Vallejo, R.P.; Buly, R.; Mumma, R.O. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Aug 1982. v. 70 (2). p. 357-360. 19 ref. (NAL Call No.: 450 P692).

1778

**Comparative metabolism of (the herbicide) 2,4-dichlorophenoxyacetic acid in cotyledon and leaf callus from two varieties of soybean.** Davidonis, G.H. Hamilton, R.H.; Mumma, R.O. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. Jan 1980. v. 65 (1). p. 94-97. ill. 8 ref. (NAL Call No.: 450 P692).

1779

A comparison of various growth parameters of cell suspension cultures to determine phytotoxicity of xenobiotics (Soybean, Glycine max, einkorn, Triticum monococcum, detergent or herbicide).

Davis, D.G. Stolzenberg, R.L.; Dusky, J.A. Champaign : Weed Science Society of America. Weed science. Mar 1984. v. 32 (2). p. 235-242. ill. Includes references. (NAL Call No.: 79.8 W41).

1780

Compatibility and phytotoxicity of herbicide-fertilizer combinations (Tested on oats and soybeans, phytotoxicity).

Martens, A.R. Burnside, D.C. Madison. Agronomy Journal American Society of Agronomy. Nov/Dec 1978. v. 70 (6). p. 1089-1098. ill. 9 ref. (NAL Call No.: 4 AM34P).

1781

Compatibility of diclofop and BAS 9052 (2-(1-(ethoxyimino)-butyl)-5-2(2-(ethylthio)propyl)-3-hydroxy-2-cyclohexen-1-one) with Bentazon (Herbicides, soybeans, injury, antagonism).

Campbell, J.R. Penner, D. Champaign. Ill., Weed Science Society of America. Weed science. Sept 1982. v. 30 (5). p. 458-462. 12 ref. (NAL Call No.: 79.8 W41).

1782

The contribution of herbicides and other technologies to soybean production in the Corn Belt Region, 1965 to 1979.

Schroder, D. Headley, J.C.; Finley, R.M. Columbia, Missouri, The Department. Extract: This report attempts to identify the contributions of technology and weather to soybean yield variation for the period 1965 to 1979 in the Corn Belt Region. Technology variables included were genetic improvement, herbicides, and row-width. A pooled cross-sectional time-series data base was used to estimate regression parameters for herbicides and other variables. A marginal private benefit/cost return of \$2.3 per dollar of herbicide cost was estimated for additional land treated with herbicides. Paper - University of Missouri-Columbia, Dept. of Agricultural Economics. (1981?). (1981?). (1981-33). 25 p. 35 ref. (NAL Call No.: 917437(AGE)).

1783

Control and management of itchgrass (*Rottboellia exaltata*, weeds, herbicides effective in soybean fields).

Harger, T.R. Vidrine, P.R.; Nester, P.R. Baton Rouge, La., The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Summer 1982. v. 25 (4). p. 20-21, 24. ill. (NAL Call No.: 100 L939).

1784

Control of cowpea (*Vigna unguiculata*) in soybean (*Glycine max*) with acifluorfen (Herbicides evaluation, phytotoxicity, South Carolina).

Murphy, T.R. Gossett, B.J. Champaign, Ill. : Weed Science Society of America. Weed science. July/Aug 1982. v. 32 (4). p. 427-431. Includes 19 references. (NAL Call No.: 79.8 W41).

1785

Corn and soybean response to allelopathic effects of weed and crop residues.

Bhowmik, P.C. Doll, J.D. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 601-606. 17 ref. (NAL Call No.: 4 AM34P).

1786

Determination of herbicide inhibition of photosynthetic electron transport by fluorescence (Soybeans, atrazine, diuron).

Richard, E.P. Jr. WEESA. Goss, J.R.; Arntzen, C.J.; Slife, F.W. Champaign : Weed Science Society of America. Weed science. May 1983. v. 31 (3). p. 361-367. ill. Includes references. (NAL Call No.: 79.8 W41).

1787

Diffusion of selected herbicides in water and in soil to soybeans / by H. Don Scott.

Scott, H. Don (Hubert Donovan), 1944. 1971. Thesis (Ph.D.)--University of Kentucky, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xiv, 215 leaves ; 21 cm. Bibliography: leaves 203-215. (NAL Call No.: DISS 72-21,483).

1788

Distribution of chlorinated pesticides in soybeans, soybean oil, and its by-products during processing (Effectiveness of processing steps on the removal of residues).

Chaudry, M.M. Nelson, A.I. Champaign, Ill. Journal American Oil Chemists' Society. Dec 1978. v. 55 (12). p. 851-853. ill. 12 ref. (NAL Call No.: 307.8 J82).

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1789

**Ecological impact of parathion in soybeans. I. Vegetative fauna. (Predatory arthropods, detrimental effects, insecticides, *Plathypena scabra*, natural control, Missouri field experiments).**  
Marston, N.L.XATBA. Hennessey, M.K. Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Dec 1982. Dec 1982. (1665). p. 1-7. ill. Includes references. (NAL Call No.: 1 AG84TE).

1790

**Ecological impact of parathion in soybeans (Insecticides, adverse effects, natural control, predatory arthropods).**  
Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Dec 1982. Dec 1982. (1665). 23 p. ill. Includes references. (NAL Call No.: 1 AG84TE).

1791

**Ecological impact of parathion in soybeans. II. Soil arthropod fauna (Insecticides, nontarget species, sampling, Missouri).**  
Hennessey, M.K.XATBA. Marston, N.L. Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Dec 1982. Includes taxonomic list of soil arthropods collected. Dec 1982. (1665). p. 8-23. ill. Includes references. (NAL Call No.: 1 AG84TE).

1792

**Economic consequences of bans on corn (*Zea mays*) and soybean (*Glycine max*) herbicides commonly used on Indiana farms.**  
Cashman, C.M. Martin, M.A.; McCarl, B.A. Champaign, Ill., Weed Science Society of America. Weed science. May 1981. v. 29 (3). p. 323-328. 4 ref. (NAL Call No.: 79.8 W41).

1793

**Effect of fungicides and herbicides on nodulation and N<sub>2</sub> (nitrogen) fixation in soybean fields lacking indigenous *Rhizobium japonicum* (Survival of granular and seed-applied inoculants of *Rhizobium*).**  
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Park, J.K. Nafziger, E.D.; Swanson, E.R. Urbana, Ill., The Department. Illinois agricultural economics staff paper, series E agricultural economics - Dept. of Agricultural Economics, University of Illinois. July 1981. July 1981. (81 E-183). 35 p. 53 ref. (NAL Call No.: 916937(AGE)).

1867

**Synthetic polymers for controlled-release of herbicides (Metribuzin, used for weed control in soybeans).**

McCormick, C.L. Lichatowich, D.K. n.p. Journal Mississippi Academy of Sciences. 1978. v. 23. p. 6-10. ill. 14 ref. (NAL Call No.: 500 M697).

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**Tolerance of soybean genotypes to metribuzin (Herbicides, injury).**

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1869

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1870

**Translocation of different 2,4-D, bentazon, diclofop, or diclofop-methyl combinations in oat (Avena sativa) and soybean (Glycine max) (Herbicides, antagonism).**

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1871

**Uptake and release of herbicides by soybean roots in culture solutions.**

Moody, Keith, 1940. Ann Arbor, Mich. University Microfilms 1971. Thesis--University of Wisconsin, 1969. (iv), 136 leaves. Bibliography: leaves (119)-128. (NAL Call No.: DISS 70-3,635).

1872

**Volatilization of microencapsulated and conventionally applied chlorpropham (herbicide) in the field (Soil residues, soybeans).**

Turner, B.C. Glotfelty, D.E. Madison. Agronomy journal American Society of Agronomy. Nov/Dec 1978. v. 70 (6). p. 933-937. ill. 16 ref. (NAL Call No.: 4 AM34P).

1873

**1980 Kansas field crop insect control recommendations.**

Brooks, Leroy. Gates, Dell E. 1980. First this publication discusses some safety tips for using insecticides, then it discusses the control of insects attacking alfalfa, corn, sorghum, wheat, and soybeans. It also includes a list of the Poison Control Information Centers in Kansas. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 27 p. (NAL Call No.: C 431).

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**1980 pesticide use on soybeans in the major producing states.**

Hanthorn, M. Osteen, C.; McDowell, R.; Roberson, L. Washington, D.C., The Service. Extract: Farmers reported that 124.6 million pounds (a.i.) of pesticides were applied to soybeans in the major producing States during 1980. This consisted of 114.4 million pounds (a.i.) of herbicides, 8 million pounds (a.i.) of insecticides, 1.5 million pounds (a.i.) of nematocides, and 600,000 pounds (a.i.) of fungicides. Pesticide acre-treatments totaled 106.6 million and consisted of 95.5 million with herbicides, 9.3 million with insecticides, 600,000 with nematocides, and 1.2 million with fungicides. The primary herbicides were alachlor, bentazon, and trifluralin. The major insecticides were carbaryl, methomyl, and methyl parathion. Aldicarb and ethylene dibromide were the primary nematocides and benomyl was the major fungicide. ERS staff report - U.S. Dept. of Agriculture, Economic Research Service. Jan 1982. Available from NTIS. Jan 1982. (AGES820106). 32 p. 4 ref. (NAL Call No.: 916762(AGE)).

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1875

### 1980 pesticide use on soybeans in the Mississippi Valley.

Hanthorn, M. Osteen, C.; McDowell, R.; Roberson, L. Washington, D.C., The Service. Extract: Farmers reported that 28.5 million pounds (a.i.) of pesticides were applied to soybeans in the Mississippi Valley during 1980. This consisted of 26 million pounds (a.i.) of herbicides, 2.3 million pounds (a.i.) of insecticides, 51,000 pounds (a.i.) of nematocides, and 201,000 pounds (a.i.) of fungicides. Pesticide acre-treatments totaled 31.9 million and consisted of 28.4 million with herbicides, 2.8 million with insecticides, 68,000 with nematocides, and 721,000 with fungicides. The primary herbicides were alachlor, bentazon, metribuzin, and trifluralin. The major insecticides were carbaryl, methomyl, and methyl parathion. Benomyl was the primary fungicide. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Jan 1982. Available from NTIS. Jan 1982. (AGES820127). 32 p. 4 ref. (NAL Call No.: 916762(AGE)).

1876

### 1980 pesticide use on soybeans in the North Central States.

Hanthorn, M. Osteen, C.; McDowell, R.; Roberson, L. Washington, D.C., The Service. Extract: Farmers reported that 77.8 million pounds (a.i.) of pesticides were applied to soybeans in the North Central States during 1980. This consisted of 77.1 million pounds (a.i.) of herbicides and 700,000 pounds (a.i.) of insecticides. Pesticide acre-treatments totaled 58.1 million and consisted of 44.8 million with single material herbicides, 12.6 million with herbicide mixes, and 700,000 with insecticides. The primary herbicides were alachlor, bentazon, metribuzin, and trifluralin. The major insecticide was carbaryl. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Feb 1982. Available from NTIS. Feb 1982. (AGES820209). 32 p. 4 ref. (NAL Call No.: 916762(AGE)).

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### 1980 pesticide use on soybeans in the Southeast.

Hanthorn, M. Osteen, C.; McDowell, R.; Roberson, L. Washington, D.C., The Service. Extract: Farmers reported that 18.1 million pounds active ingredient (a.i.) of pesticides were applied to soybeans in the Southeast during 1980. This consisted of 11.3 million pounds (a.i.) of herbicides, 5.1 million pounds (a.i.) of insecticides, 1.4 million pounds (a.i.) of nematocides, and 234,000 pounds (a.i.) of fungicides. Pesticide acre-treatments totaled 16.4 million and consisted of 9.7 million with herbicides, 5.8 million with insecticides, 555,000 with nematocides, and 384,000 with fungicides. The primary herbicides were alachlor, bentazon, metribuzin, and

trifluralin. The major insecticides were carbaryl and methomyl. Aldicarb and ethylene dibromide were the primary nematocides and benomyl was the major fungicide. ERS staff report - U.S. Dept. of Agriculture, Economic Research Service. Feb 1982. Available from NTIS. Feb 1982. (AGES820203). 28 p. 4 ref. (NAL Call No.: 916762(AGE)).

1878

### 1981 Kansas field crops insect control recommendations.

Brooks, Leroy. Gates, Dell E. 1981. First this publication discusses some safety tips for using insecticides, then it discusses the control of insects attacking alfalfa, corn, sorghum, wheat, and soybeans. It also includes a list of the Poison Control Information Centers in Kansas. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 28 p. (NAL Call No.: C 431).

1879

### 1982 weed control guide for field crops.

Barrett, Michael. Meggitt, William F. 1981. This publication has information on how to control weeds in corn, soybeans, small grains, field beans, sunflowers, potatoes, mint, sugarbeets, forages, & sorghum crops. Document available from: Michigan State University, Bulletin Office, P.O. Box 231, East Lansing, MI 48824. 35 p. (NAL Call No.: Not available at NAL.). (NAL Call No.: Ext. Bulletin E-434).

1880

### 2,4-D (2,4-dichlorophenoxy acetic acid) metabolism in soybean cell suspensions.

Davis, D.G. Lamoureux, G.L. Grand Forks, N.D., The Academy. Proceedings of the North Dakota Academy of Science. Apr 1981. v. 35. p. 36. (NAL Call No.: 500 N813).

# SOIL SCIENCE

1881

**Effects of (the root-knot nematode) *Meloidogyne incognita* on nitrogen fixation in soybean.**

Baldwin, J.G. Barker, K.R. Ames, Iowa, Society of Nematologists. Journal of nematology. Apr 1979. v. 11 (2). p. 156-161. ill. 18 ref. (NAL Call No.: QL391.N4J62).

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**Manganese concentration in soybean leaves as affected by cultivars and soil properties (Includes toxicity).**

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# SOIL BIOLOGY

1883

**Description of *Hoplolaimus magnistylus* n. sp. (Nematoda: Hoplolaimidae) (found in soil about roots of soybean in Arkansas and Mississippi).**  
Robbins, R.T.JONEB. Ames : Society of Nematologists. Journal of nematology. Oct 1982. v. 14 (4). p. 500-506. ill. Includes references. (NAL Call No.: QL391.N4J62).

1884

**Ecological impact of parathion in soybeans. II. Soil arthropod fauna (Insecticides, nontarget species, sampling, Missouri).**  
Hennessey, M.K.XATBA. Marston, N.L. Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Dec 1982. Includes taxonomic list of soil arthropods collected. Dec 1982. (1665). p. 8-23. ill. Includes references. (NAL Call No.: 1 AG84TE).

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**Effect of chemical soil treatment on plant growth, nitrogen fixation, and fungal colonization of *Rhizobium* nodules of soybeans (*Rhizotonia japonicum*, *Glycine max*, fungal pathogens).**  
Widin, K.D.PHYTA. Kennedy, B.W. St. Paul : American Phytopathological Society. Phytopathology. Mar 1983. v. 73 (3). p. 429-434. Includes references. (NAL Call No.: 464.8 P56).

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**Effects of pyrethroid insecticide seed treatments on *Rhizobium japonicum* and its symbiotic relationship with, and growth of soybean.**  
Tu, C.M.JPFCD. New York : Marcel Dekker. Journal of environmental science and health. Part B. Pesticides, food contaminants, and agricultural wastes. 1983. v. 18 (3). p. 369-378. ill. Includes references. (NAL Call No.: TD172.J61).

1887

**Investigation of possible abscisic acid control of nitrogen fixation in soybean nodules / by Allan James Ciha.**  
Ciha, Allan James. 1949. 1976. Thesis (Ph.D.)--University of Minnesota, 1976. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1978. 75 leaves ; 21 cm. Bibliography: leaves 74-75. (NAL Call No.: DISS 77-12,793).

1888

**Parasitic and mutualistic associations between a mycorrhizal fungus and soybean: development of the host plant.**  
Bethlenfalvay, G.J. Brown, M.S.; Pacovsky, R.S. St. Paul, American Phytopathological Society. Phytopathology. July 1982. v. 72 (7). p. 889-893. ill. 26 ref. (NAL Call No.: 464.8 P56).

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Devine, T.E. AR-BARC. Breithaupt, B.H. Madison, Wis., Crop Science Society of America. Crop science. May/June 1980. v. 20 (3). p. 394-396. ill. 10 ref. (NAL Call No.: 64.8 C883).

1890

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Kittle, D.R. Gray, L.E. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1982. v. 66 c (3). p. 213-215. Includes 20 ref. (NAL Call No.: 1.9 P69P).

# SOIL CHEMISTRY AND PHYSICS

1891

## **Annual progress report - 1980 / Iowa State University.**

Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1980. This publication is a progress report and should not be considered conclusive. The topics covered are soil moisture report, K fertilization for corn and soybeans, sunflower populations, conservation tillage, crop disease trap plots, corn herbicides, spring wheat variety demonstration, musk thistle control, grain sorghum trial, and small grain selection. 17 p. : ill. (NAL Call No.: Document available from source.).(NAL Call No.: ORC 80-10).

1892

## **Annual progress report - 1980 / Iowa State University.**

Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1981. This publication is a progress report in the following areas: soil moisture, corn and soybean herbicides, delayed planting of soybeans, plant populations for sunflowers, rock phosphate and superphosphate comparison, rates of N and P fertilizers, brown stem rot, tillage observations, seedbed preparations for corn and soybean, and crop variety research. 25 p. : ill. (NAL Call No.: Document available from source.).(NAL Call No.: ORC 80-29).

1893

## **Chlorobiphenyl movement from soil to soybean plants.**

Fries, G.F. Marrow, G.S. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1981. v. 29 (4). p. 757-759. 11 ref. (NAL Call No.: 381 J8223).

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## **A comparative study of soil solution chemistry associated with chlorotic and nonchlorotic soybeans in western Minnesota (Iron nutritional status).**

Inskeep, W.P. Bloom, P.R. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1984. Presented at the "Second International Symposium on Iron Nutrition and Interactions in Plants," August 2-5, 1983, Utah State University, Logan. v. 7 (1/5). p. 513-531. ill., maps. Includes references. (NAL Call No.: QK867.J67).

1895

**The effect of sprinkler irrigation on herbicide efficacy, distribution, and penetration in some Coastal Plain soils (Applied on corn, peanuts and soybeans, weed control, southwest Georgia).** Dowler, C.C.GARRA. Rohde, W.A.; Fetzer, L.E.; Scott, D.E. Sr.; Sklany, T.E. Athens : The Stations. Research report - University of Georgia, College of Agriculture, Experiment Stations. Aug 1982. Aug 1982. (281). 27 p. ill. Includes references. (NAL Call No.: S51.E22).

1896

## **Effects of soil water content on pendimethalin dissipation (Oryza sativa, Glycine max, herbicide).**

Barrett, M.R.JEVQA. Lavy, T.L. Madison : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1983. v. 12 (4). p. 504-508. Includes references. (NAL Call No.: QH540.J6).

1897

## **The effects of vesicular-arbuscular mycorrhizae on uptake of Sr 90 by soybeans and on growth and phosphorus content of three agronomic crops / by Nelroy Evan Jackson.**

Jackson, Nelroy Evan, 1942. 1970. Thesis (Ph.D.)--Ohio State University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. viii, 59 leaves ; 21 cm. Bibliography: leaves 58-59. (NAL Call No.: DISS 71-18,026).

1898

## **Soybean emergence from field seedbed environments (Soil penetration resistance, different planter and drill press-wheel tires, fungicide seed treatment).**

Hummel, J.W. Gray, L.E.; Nave, W.R. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. July/Aug 1981. v. 24 (4). p. 872-879. ill. 9 ref. (NAL Call No.: 290.9 AM32T).

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1899

## **Annual progress report - 1980 / Iowa State University.**

Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1980. This publication is a progress report and should not be considered conclusive. The topics covered are soil moisture report, K fertilization for corn and soybeans, sunflower populations, conservation tillage, crop disease trap plots, corn herbicides, spring wheat variety demonstration, musk thistle control, grain sorghum trial, and small grain selection. 17 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: ORC 80-10).

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Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1981. This publication discusses the research center experiments on tiling methods, time of planting corn, S and Zn fertilizers, fuel and time requirements for tillage system, organic and chemical farming, soybean bacterial tan spot loss, and pasture nutrient losses. Herbicide evaluation and crop variety tests are included. 19 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: ORC 80-13).

1901

## **Diffusion of selected herbicides in water and in soil to soybeans / by H. Don Scott.**

Scott, H. Don (Hubert Donovan), 1944. 1971. Thesis (Ph.D.)--University of Kentucky, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xiv, 215 leaves ; 21 cm. Bibliography: leaves 203-215. (NAL Call No.: DISS 72-21,483).

1902

## **Effect of fertilizer-N and herbicides on the growth and N (nitrogen) content of soybeans and cowpeas.**

Behran, S. Maftoun, M. Madison. Agronomy journal American Society of Agronomy. July/Aug 1979. v. 71 (4). p. 533-538. ill. 28 ref. (NAL Call No.: 4 AM34P).

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## **Effect of nitrogen fertilization on abundance of the bean leaf beetle (*Cerotoma trifurcata*) in soybean.**

Burleigh, J.G. Katayama, R.W.; Hubbard, L. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1980. v. 29 (6). p. 5. (NAL Call No.: 100 AR42F).

1904

**Evaluation of the need for copper with several soil extractants (Deficiencies, critical levels, soybeans, Glycine max, corn, Zea mays, wheat, *Triticum aestivum*, soils from the Atlantic Coastal Plain, North Carolina).** Makarim, A.K.AGUOA. Cox, F.R. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 493-496. Includes references. (NAL Call No.: 4 AM34P).

1905

## **Improving the field production environment for soybeans (Cultivation practices, application of fertilizers, crop protection from weeds, insects and diseases).**

Lam-Sanchez, A. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Mar 1981. v. 58 (3). p. 128-130. Includes 15 ref. (NAL Call No.: 307.8 J82).

# SOIL RESOURCES AND MANAGEMENT

1906

**Tillage systems for Illinois (Includes pest and disease control for maize, soybeans, wheat).**  
Siemens, J.C. Shurtleff, M.C. Urbana, Ill., The Service. Circular. Illinois. University.  
Cooperative Extension Service. June 1979. June 1979. (1172). 22 p. ill. 1 ref. (NAL Call No.: 275.29 IL62C).

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1907

## Annual progress report - 1980 / Iowa State University.

Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1981. This publication is a progress report in the following areas: soil moisture, corn and soybean herbicides, delayed planting of soybeans, plant populations for sunflowers, rock phosphate and superphosphate comparison, rates of N and P fertilizers, brown stem rot, tillage observations, seedbed preparations for corn and soybean, and crop variety research. 25 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: ORC 80-29).

1908

## Crop production as related to irrigation for several crops at different locations: Soybean evapotranspiration and yield response to growth stage water deficits (Glycine max, irrigation timing, stress, Colorado).

Hanks, R.J. Danielson, R.E.; Pruitt, W.O.; Martin, P.E. Logan : The Station. Research report - Utah Agricultural Experiment Station. 1982. 1982. (65). p. 344-367. ill. 11 ref. (NAL Call No.: S1.U7).

1909

## Double cropping winter wheat and soybeans in Indiana.

Swearingin, Marvin L. Bauman, Thomas T.; Robbins, Paul R.; Edwards, Richard.; Doster, D. Howard.; Parsons, Samuel D. 1979. This publication extensively covers double cropping winter wheat and soybeans in Indiana. The contents of the article covers an overview of double cropping in Indiana. Management suggestions for no-till double cropping, profit potential of double cropping wheat and soybean, weed control in double cropping, insect control, along with harvesting and drying high moisture wheat. Document available from: Mailing Room, Ag. Administration Bldg., Purdue University, West Lafayette, IN 47907. 22 p. : ill. (NAL Call No.: IO-96).

1910

## Effect of the soybean cyst nematode on soybean production under different management systems (Continuous cropping, 1976-1981, Mississippi).

Hartwig, E.E. Buehring, N.; Young, L.D. Mississippi State : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Apr 1983. v. 46 (4). p. 6-7. (NAL Call No.: 100 M69M1).

1911

## Effect of three weed control regimes on no-till and tilled soybeans (Glycine max) (Conservation tillage, compacted soil).

Robinson, E.L. WEESA6. Langdale, G.W.; Stuedmann, J.A. Champaign : Weed Science Society of America. Weed science. Jan 1984. v. 32 (1). p. 17-19. Includes references. (NAL Call No.: 79.8 W41).

1912

## Effects of rotations with susceptible and resistant peanuts, soybeans, and corn on inoculum efficiency of *Cylindrocladium crotalariae* on peanuts (*Arachis hypogaea*, *Glycine max*, *Zea mays*, root rot, North Carolina).

Black, M.C. Beute, M.K. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1984. v. 68 (5). p. 401-405. ill. Includes references. (NAL Call No.: 1.9 P69P).

1913

## Evaluation of soil physical properties limiting soybean root development in Louisiana soils (Tillage treatments).

Selim, H.M. Wood, J.R. Jr.; Wilson, G.V.; Kingery, W.L. Baton Rouge, La., The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 170-183. ill. (NAL Call No.: 100 L936).

1914

## Forage production and weed control in a double-cropping program (*Avena sativa*, *Zea mays*, *Glycine max*, *Sorghum bicolor*, Wisconsin).

Okoli, P.S.O. Orolsom, P.N.; Scholl, J.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. May/June 1984. v. 76 (3). p. 363-366. Includes references. (NAL Call No.: 4 AM34P).

1915

## Herbicides for 0-till corn in soybean stubble, 1979 (No-tillage systems, Illinois).

McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC - Dixon Springs Agricultural Center. Jan 1980. Jan 1980. (8). p. 57-60. Includes 1 ref. (NAL Call No.: S1.D5).

1916

**Identification and evaluation of soil chemical and physical properties limiting root development in Louisiana soils (Soybeans, wheat, minimum tillage, yields).**  
Dabney, S.M. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 290-299. ill. (NAL Call No.: 100 L936).

1917

**Influence of maize rotations on the yield of soybean grown in Meloidogyne incognita infested soil (Root-knot nematode, cultivars, southeastern USA).**  
Kinloch, R.A. Ames, Iowa : Society of Nematologists. Journal of nematology. July 1983. v. 15 (3). p. 398-405. Includes references. (NAL Call No.: QL391.N4J62).

1918

**No-till soybeans without herbicides (Iowa).**  
Thompson, D. Thompson, S. Emmaus, Pa., Rodale Press. The New farm. Sept/Oct 1982. v. 4 (6). p. 22-25. (NAL Call No.: S1.N32).

1919

**Reduce tillage--but not weed control (Soybeans).**  
Mangold, G. St. Louis, Mo., American Soybean Association. Soybean digest. Feb 1981. v. 41 (4). p. 10-11. ill. (NAL Call No.: 60.38 S09).

1920

**Soil and water management in soybean production systems (Conservation tillage, erosion control, double-cropping, no-till, strip-cropping).**  
Buntley, G.J. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Summer 1982. v. 66. p. 3-5. (NAL Call No.: 6 B46).

1921

**Tillage and weed control practices in soybeans grown on Sharkey clay soil.**  
Barrentine, W.L. Tupper, G.R. Mississippi State, Miss. : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Dec 1983. v. 46 (12). p. 1-4. ill. Includes references. (NAL Call No.: 100 M69MI).

1922

**Tillage effects on weed control (Herbicides, for corn and soybean production).**  
Pope, R.A. Siemens, J.C.; Bode, L.E. St. Joseph, Mich. (P.O. Box 410), American Society of Agricultural Engineers, 1980. Crop production with conservation in the 80's : proceedings of the American Society of Agricultural Engineers Conference on Crop Production with Conservation in the 80's, December 1-2, 1980, Palmer House, Chicago, Illinois. p. 134-142. ill. 4 ref. (NAL Call No.: S494.5.P75C7).

1923

**Use of nitrogen stress to demonstrate the effect of yield limiting factors on the yield response of soybean to narrow row systems (Glycine max, solid seeding, Ohio).**  
Cooper, R.L. Jeffers, D.L. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 257-259. Includes references. (NAL Call No.: 4 AM34P).

1924

**Volunteer corn control (Weed corn in soybeans, crop rotation systems, glyphosate, Minnesota).**  
Pierce, R. Washington, D.C., The Service. Agricultural research - United States Agricultural Research Service. Nov 1981. v. 30 (5). p. 7. ill. (NAL Call No.: 1.98 AG84).

1925

**Weed-control evaluations in no-till soybeans (Glycine max) double-cropped with rye (Secale cereale) (Georgia).**  
Banks, P.A. GARRA. Kvien, J.S. Athens : The Stations. Research report - University of Georgia, College of Agriculture, Experiment Stations. July 1983. July 1983. (431). 6 p. Includes references. (NAL Call No.: S51.E22).

1926

**Weed control for corn and soybeans in reduced tillage systems.**  
Miller, G. R. Coultas, J. S. & Agricultural chemicals. Document available from: University of Minnesota, Bulletin Room, 1420 Eckles Avenue, St. Paul, Minnesota 55108 1979. Lists herbicides for corn and soybean grown in reduced tillage system. 1 sheet : ill. (NAL Call No.: Document available from source.). (NAL Call No.: Fs No.12).

## **(SOIL CULTIVATION)**

**1927**

**Weed control in a low-till oat (Avena sativa)-soybean (Glycine max) rotation.**  
Burnside, O.C.WEESA. Carlson, D.R. Champaign :  
Weed Science Society of America. Weed science.  
Nov 1983. v. 31 (6). p. 853-856. Includes  
references. (NAL Call No.: 79.8 W41).

**1928**

**Weed control in double cropped corn, grain sorghum, or soybeans minimum-till planted following canning peas.**  
Ndon, B.A. Harvey, R.G.; Scholl, J.M. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1982. v. 74 (2). p. 266-269.  
Includes 21 ref. (NAL Call No.: 4 AM34P).

**1929**

**Whip weeds in no-till soybeans (Control).**  
Ehmke, V. St. Louis, Mo., American Soybean Association. Soybean digest. Apr 1981. v. 41 (6). p. 26-27. ill. (NAL Call No.: 60.38 S09).

**1930**

**With no-tillage, hit weeds early! (Early preplant application of herbicides, maize, soybeans, Iowa).**  
Waukesha, Wis. : No-Till Farmer, Inc. No-till farmer. Apr 1984. Apr 1984. p. 12. ill. (NAL Call No.: S604.N6).

# FORESTRY RELATED

1931

**Host specificity of *Phytophthora megasperma* from Douglas fir (*Pseudotsuga menziesii*), soybean, and alfalfa.**

Hamm, P.B. Hansen, E.M. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Jan 1981. v. 71 (1). p. 65-68. 20 ref. (NAL Call No.: 464.8 P56).

1932

**Locust leaf miner development on soybean in Virginia (*Odontota dorsalis*).**

McPherson, R.M.GENSA. Ravlin, F.W. Athens : The Society. *Journal of the Georgia Entomological Society*. Jan 1983. v. 18 (1). p. 58-60. Includes references. (NAL Call No.: QL461.G4).

1933

**Responses of selected plant species to elevated carbon dioxide in the field (*Zea mays*, *Glycine max*, *Pinus taeda*, *Liquidambar styraciflua*).**

Rogers, H.H.JEVQA. Bingham, G.E.; Cure, J.D.; Smith, J.M.; Surano, K.A. Madison : American Society of Agronomy. *Journal of environmental quality*. Oct/Dec 1983. v. 12 (4). p. 569-574. Includes references. (NAL Call No.: QH540.J6).

# ANIMAL SCIENCE

1934

**Bean leaf beetle (*Cerotoma trifurcata*): flight and dispersal behavior (Soybeans, maize).**

Boiteau, G. Bradley, J.R. Jr. College Park, Md. *AnnalsEntomological Society of America*. Mar 15, 1979. v. 72 (2). p. 298-302. ill. 10 ref. (NAL Call No.: 420 EN82).

1935

**Bean leaf beetle (*Cerotoma trifurcata*): some seasonal anatomical changes and dormancy (Soybean fields, in North Carolina).**

Boiteau, G. Bradley, J.R. Jr. College Park, Md. *AnnalsEntomological Society of America*. Mar 15, 1979. v. 72 (2). p. 303-307. ill. 15 ref. (NAL Call No.: 420 EN82).

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1936

**Common soybean insects of Indiana / Purdue University.**

Document available from: Purdue University, Publication Mailing Room, 301 South Second Street, Lafayette, Indiana 47905 1979. Lists the common soybean insects. 1 sheet : ill. (NAL Call No.: Document available from source.). (NAL Call No.: E-85).

1937

**Development of a sampling program for estimation of pupal densities of green cloverworm (Lepidoptera: Noctuidae) in soybeans and evaluation of alternative sampling procedures (Plathypena scabra).**

Bechinski, E.J.EVETB. Pedigo, L.P. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 96-100. Includes references. (NAL Call No.: QL461.E532).

1938

**Diversity and abundance of aphid species associated with soybean mosaic virus in Iowa (Rhopalosiphum maidis, Macrosiphum euphorbiae).**

Hammond, R.B. Pedigo, L.P. Lawrence : The Society. Journal of the Kansas Entomological Society. Oct 1982. v. 55 (4). p. 754-758. 4 ref. (NAL Call No.: 420 K13).

1939

**Dynamics of insect adaptations to soybean: Impact of integrated pest management.**

Kogan, M. College Park, Md., Entomological Society of America. Environmental entomology. June 1981. Paper presented at the Sixth International Congress of Plant Protection, Washington, D.C., August 1979. v. 10 (3). p. 363-371. ill. Bibliography p. 370-371. (NAL Call No.: QL461.E532).

1940

**Dynamics of natural enemy populations (Natural control agents of pests of soybeans, particularly Nabis spp., Geocoris spp., Orius insidiosus, spiders, eastern United States).**

Yeargan, K.V.SCSBA. Todd, J.W.; Mueller, A.J.; Yearian, W.C. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. June 1983. Regional Research Project S-74. June 1983. (285). p. 32-38. Includes references. (NAL Call No.: 100 G2950).

1941

**Effect of feeding by Lema trivittata (Coleoptera: Chrysomelidae) on the growth, reproduction and competitive ability of jimsonweed (Datura stramonium) in soybeans (Abstract only).**

Peterson, B.L. Dively, G.P. Beltsville, Md., The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. p. 78.p. 78. (NAL Call No.: 79.9 N814).

1942

**Flushing technique and sequential-count plan for green cloverworm (Lepidoptera: Noctuidae) moths in soybean (Plathypena scabra).**

Pedigo, L.P.EVETB. Buntin, G.D.; Bechinski, E.J. College Park : Entomological Society of America. Environmental entomology. Dec 1982. v. 11 (6). p. 1223-1228. ill. Includes references. (NAL Call No.: QL461.E532).

1943

**Immature stages of Anacamptodes herse (Schaus) (Geometridae) on soybean in Honduras.**

Passoa, S. Lawrence, Kan. : The Society. Journal of the Lepidopterists' Society. 1983. v. 37 (3). p. 217-223. ill. Includes references. (NAL Call No.: 421 L554).

1944

**A manual for implementing an integrated pest management program for insects in soybean / William A. Allen, Robert M. McPherson.**

Allen, William A. (William Albert), 1939. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1982. Pesticide Applicator Training collection ~"July 1982.". 12 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-016).

1945

**Microspatial distribution of pupal green cloverworms, Plathypena scabra (F.) (Lepidoptera: Noctuidae), in Iowa soybean fields.**

Bechinski, E.J.EVETB. Pedigo, P.L. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 273-276. ill. Includes references. (NAL Call No.: QL461.E532).

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1946

**Natural mortality of lepidopteran eggs and larvae in Missouri soybeans (*Trichoplusia ni*, *Glycine max*).**

Marston, N.L. Hostetter, D.L.; Pinnell, R.E.; Dickerson, W.A.; Smith, D.B. College Park : The Society. Annals of the Entomological Society of America. Jan 1984. v. 77 (1). p. 21-28. Includes references. (NAL Call No.: 420 EN82).

1947

**Partial life tables of the green cloverworm (*Lepidoptera: Noctuidae*) in soybean and a hypothesis of population dynamics in Iowa (*Plathypena scabra*).**

Pedigo, L.P. EVETB. Bechinski, E.J.; Higgins, R.A. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 186-195. Includes references. (NAL Call No.: QL461.E532).

1948

**Seasonal distribution of *Trichogramma* (*Hymenoptera: Trichogrammatidae*) species associated with a Maryland soybean field (*Heliothis virescens*, biological control).**

Thorpe, K.W. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1984. v. 13 (1). p. 127-132. Includes references. (NAL Call No.: QL461.E532).

1949

**Soybean insect management guidelines number 1 -- corn earworms / John C. Smith and Robert M. McPherson.**

Smith, John C. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1984. Pesticide Applicator Training collection ~Caption title ~"February 1984.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-041 1984).

1950

**Soybean insect management guidelines number 2 - Mexican bean beetles / Robert M. McPherson and John C. Smith.**

McPherson, Robert M. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1984. Pesticide Applicator Training collection ~Caption title ~"February 1984.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-042 1984).

1951

**Soybean insect management guidelines number 3 - stink bugs / Robert M. McPherson and John C. Smith.**

McPherson, Robert M. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1983. Pesticide Applicator Training collection ~Caption title ~"August 1983.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-043).

1952

**Soybean insect management guidelines, number 4 -- bean leaf beetles / Robert M. McPherson.**

McPherson, Robert M. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1984. Pesticide Applicator Training collection ~Caption title ~"February 1984.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-044).

1953

**Soybean insect management guidelines number 5 - green cloverworms / Robert M. McPherson.**

McPherson, Robert M. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1983. Pesticide Applicator Training collection ~Caption title ~"May 1983.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-045).

1954

**Soybean insect management guidelines, number 6 -- Spider mites / John C. Smith and Robert M. McPherson.**

Smith, John C. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1984. Pesticide Applicator Training collection ~Caption title ~"February 1984.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-046).

1955

**Soybean insect management guidelines number 7 - natural enemies / Holly J. Ferguson and Robert M. McPherson.**

Ferguson, Holly J. Blacksburg Extension Division, Virginia Polytechnic Institute and State University 1983. Pesticide Applicator Training collection ~Caption title ~"May 1983.". 2 p. : ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52 no.444-047).

1956

**Soybean insect management guidelines, number 8**  
-- Trap crops / Robert M. McPherson.  
McPherson, Robert M. Blacksburg Extension  
Division, Virginia Polytechnic Institute and  
State University 1983. Pesticide Applicator  
Training collection ~Caption title ~"July  
1983.". 3 p. : ill. ; 28 cm. -. (NAL Call No.:  
S544.3.V8V52 no.444-048).

1957

**Soybean insect pest management for Virginia /**  
**Robert M. McPherson and John C. Smith.**  
McPherson, Robert M. Blacksburg Extension  
Division, Virginia Polytechnic Institute and  
State University 1984. Pesticide Applicator  
Training collection ~"March 1984.". 10 p. :  
ill. ; 28 cm. -. (NAL Call No.: S544.3.V8V52  
no.444-040 1984).

1958

**Soybean insects : identification and management**  
**in Illinois / Marcos Kogan, Donald E. Kuhlman.**  
Kogan, Marcos. Kuhlman, Donald E. Urbana, Ill.  
Agricultural Experiment Station, College of  
Agriculture, University of Illinois at  
Urbana-Champaign 1982. "February, 1982". 58 p.  
: ill. (some col.) ; 28 cm. -. (NAL Call No.:  
100 IL6S (1) no.773).

# ANIMAL REPRODUCTION

1959

Effects of micrometeorological conditions on survival and fecundity of the Mexican bean beetle (*Epilachna varivestis*) in soybean fields.

Sprenkel, R.K. Rabb, R.L. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1981. v. 10 (2). p. 219-221. 8 ref. (NAL Call No.: QL461.E532).

# ANIMAL ECOLOGY

1960

Development of a sampling program for estimation of pupal densities of green cloverworm (Lepidoptera: Noctuidae) in soybeans and evaluation of alternative sampling procedures (Plathypena scabra).  
 Bechinski, E.J.EVETB. Pedigo, L.P. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 96-100. Includes references. (NAL Call No.: QL461.E532).

1961

Dynamics of insect adaptations to soybean: Impact of integrated pest management.  
 Kogan, M. College Park, Md., Entomological Society of America. Environmental entomology. June 1981. Paper presented at the Sixth International Congress of Plant Protection, Washington, D.C., August 1979. v. 10 (3). p. 363-371. ill. Bibliography p. 370-371. (NAL Call No.: QL461.E532).

1962

Dynamics of natural enemy populations (Natural control agents of pests of soybeans, particularly Nabis spp., Geocoris spp., Orius insidiosus, spiders, eastern United States).  
 Yeargan, K.V.SCSBA. Todd, J.W.; Mueller, A.J.; Yearian, W.C. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. June 1983. Regional Research Project S-74. June 1983. (285). p. 32-38. Includes references. (NAL Call No.: 100 G29S0).

1963

Ecological impact of parathion in soybeans. I. Vegetative fauna. (Predatory arthropods, detrimental effects, insecticides, Plathypena scabra, natural control, Missouri field experiments).  
 Marston, N.L.XATBA. Hennessey, M.K. Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Dec 1982. Dec 1982. (1665). p. 1-7. ill. Includes references. (NAL Call No.: 1 AG84TE).

1964

Ecological impact of parathion in soybeans (Insecticides, adverse effects, natural control, predatory arthropods).  
 Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Dec 1982. Dec 1982. (1665). 23 p. ill. Includes references. (NAL Call No.: 1 AG84TE).

1965

Effects of cultural practices on natural enemies (Beneficial arthropod dynamics in soybean, role of plant phenology, pest control implications).  
 Mayse, M.SCSBA. Pitre, H.N.; Whitcomb, W. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. June 1983. Regional Research Project S-74. June 1983. (285). p. 49-55. Includes references. (NAL Call No.: 100 G29S0).

1966

Effects of micrometeorological conditions on survival and fecundity of the Mexican bean beetle (Epilachna varivestis) in soybean fields.  
 Sprenkel, R.K. Rabb, R.L. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1981. v. 10 (2). p. 219-221. 8 ref. (NAL Call No.: QL461.E532).

1967

Establishment of infestation and behavior of Heliothis zea on soybeans in the greenhouse.  
 Pitre, H.N. Hillhouse, T.L. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Jan 1981. v. 16 (1). p. 28-34. 17 ref. (NAL Call No.: QL461.G4).

1968

Flushing technique and sequential-count plan for green cloverworm (Lepidoptera: Noctuidae) moths in soybean (Plathypena scabra).  
 Pedigo, L.P.EVETB. Buntin, G.D.; Bechinski, E.J. College Park : Entomological Society of America. Environmental entomology. Dec 1982. v. 11 (6). p. 1223-1228. ill. Includes references. (NAL Call No.: QL461.E532).

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Microspatial distribution of pupal green cloverworms, Plathypena scabra (F.) (Lepidoptera: Noctuidae), in Iowa soybean fields.  
 Bechinski, E.J.EVETB. Pedigo, P.L. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 273-276. ill. Includes references. (NAL Call No.: QL461.E532).

## **(ANIMAL ECOLOGY)**

**1970**

**Natural mortality of lepidopteran eggs and larvae in Missouri soybeans (*Trichoplusia ni*, *Glycine max*).**

Marston, N.L. Hostetter, D.L.; Pinnell, R.E.; Dickerson, W.A.; Smith, D.B. College Park : The Society. Annals of the Entomological Society of America. Jan 1984. v. 77 (1). p. 21-28. Includes references. (NAL Call No.: 420 EN82).

**1971**

**Partial life tables of the green cloverworm (Lepidoptera: Noctuidae) in soybean and a hypothesis of population dynamics in Iowa (*Plathypena scabra*).**

Pedigo, L.P. EVETB. Bechinski, E.J.; Higgins, R.A. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 186-195. Includes references. (NAL Call No.: QL461.E532).

**1972**

**Quantitative assessment of the predators of *Nezara viridula* eggs and nymphs within a soybean agroecosystem using an ELISA (enzyme linked immunosorbent assay, Natural control).**

Ragsdale, D.W. Larson, A.D.; Newsom, L.D. College Park, Md., Entomological Society of America. Environmental entomology. June 1981. v. 10 (3). p. 402-405. 10 ref. (NAL Call No.: QL461.E532).

**1973**

**Seasonal distribution of *Trichogramma* (Hymenoptera: Trichogrammatidae) species associated with a Maryland soybean field (*Heliothis virescens*, biological control).**

Thorpe, K.W. College Park, Md. : Entomological Society of America. Environmental entomology. Feb 1984. v. 13 (1). p. 127-132. Includes references. (NAL Call No.: QL461.E532).

# ANIMAL NUTRITION

1974

Effect of feeding by *Lema trivittata*  
(Coleoptera: Chrysomelidae) on the growth,  
reproduction and competitive ability of  
jimsonweed (*Datura stramonium*) in soybeans  
(Abstract only).

Peterson, B.L. Dively, G.P. Beltsville, Md.,  
The Society. Proceedings - annual meeting of  
the Northeastern Weed Science  
Society. Northeastern Weed Science Society. p.  
78.p. 78. (NAL Call No.: 79.9 N814).

# ANIMAL TAXONOMY AND GEOGRAPHY

1975

**Common soybean insects of Indiana / Purdue University.**

Document available from: Purdue University, Publication Mailing Room, 301 South Second Street, Lafayette, Indiana 47905 1979. Lists the common soybean insects. 1 sheet : ill. (NAL Call No.: Document available from source.)(NAL Call No.: E-85).

1976

**Immature stages of *Anacamptodes herse* (Schaus) (Geometridae) on soybean in Honduras.**

Passoa, S. Lawrence, Kan. : The Society. Journal of the Lepidopterists' Society. 1983. v. 37 (3). p. 217-223. ill. Includes references. (NAL Call No.: 421 L554).

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**Soybean insects : identification and management in Illinois / Marcos Kogan, Donald E. Kuhlman.**  
Kogan, Marcos. Kuhlman, Donald E. Urbana, Ill. Agricultural Experiment Station, College of Agriculture, University of Illinois at Urbana-Champaign 1982. "February, 1982". 58 p. : ill. (some col.) ; 28 cm. -. (NAL Call No.: 100 IL6S (1) no.773).

# VETERINARY PHARMACOLOGY, TOXICOLOGY AND IMMUNE THERAPEUTIC AGENTS

1978

Enzyme immunoassay and fluoroimmunoassay for the herbicide diclofop-methyl (Residue analysis of pesticides, quantification in soil, urine, serum, wheat, soybeans, sugar beets).

Schwalbe, M. Dorn, E.; Beyermann, K.

Washington, D.C. : American Chemical Society.

Journal of agricultural and food chemistry.

July/Aug 1984. v. 32 (4). p. 734-741. ill.

Includes 17 references. (NAL Call No.: 381 J8223).

# PESTS OF ANIMALS - GENERAL AND MISC.

**1978**

**Browsing deer feed on early bean growth (Damage to soybeans).**

Humphries, B. NC. Raleigh, The Station.  
Research and farming - North Carolina  
Agricultural Research Service. North Carolina.  
Agricultural Experiment Station. Winter/Spring  
1979. v. 37 (3/4). p. 7. ill. (NAL Call No.:  
100 N81R).

**1980**

**Pesticide applicator certification.**

(United States? s.n.) 1982. Pesticide  
Applicator Training Collection ~Title from  
container ~Beta format. 4 videocassettes (ca.  
60 min. each) : sd., col. ; 1/2 in. (NAL Call  
No.: Videocassette no.5).

# PEST OF ANIMALS - INSECTS

1981

**Corn silk volatiles attract many pest species of moths (European corn borer, soybean looper, tarnished plant bug, *Cisseps fulvicollis*, and forage looper).**

Cantelo, W.W. AR-BARC. Jacobson, M. New York, Marcel Dekker. Journal of environmental science and health. Part A: Environmental science and engineering. 1979. v. A14 (8). p. 695-707. ill. 19 ref. (NAL Call No.: TD172.J6).

1982

**Effect of soybean trypsin inhibitor-loaded erythrocytes on fecundity and midgut protease and hemolysis of stable flies (*Stomoxys calcitrans*).**

Deloach, J.R. Spates, G.E. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 1980. v. 73 (4). p. 590-594. 13 ref. (NAL Call No.: 421 J822).

1983

**A six-year population survey of eye gnats (*Hippelates pusio* Loew, Diptera:Chloropidae) at a large soybean farm in northern Bay County, Florida.**

Floore, T.G. Ruff, J.P. Ft. Myers, Fla. : The Association. Proceedings of the Florida Anti-Mosquito Association. 1982. v. 53 (1). p. 27-30. ill. Includes references. (NAL Call No.: 420 F663).

1984

**Socio-economic factors relating to the IFA (Imported Fire Ant) and its management (*Solenopsis*, pests of livestock, fruits, vegetables, hay, soybeans, agricultural losses).**

Headley, J.C. Aspelin, A.; Adams, C.T.; Brooks, T.; Brown, R.E. (Washington, D.C.?) : U.S. Dept. of Agriculture, APHIS. 1982. Proceedings of the Symposium on the Imported Fire Ant, June 7-10, 1982, Atlanta American Hotel, Atlanta, Georgia / editor S.L. Battenfield. p. 41-50.5. Includes references. (NAL Call No.: SB945.F535S9 1982).

# PEST OF ANIMALS - HELMINTHS

1985

## **Soybean cyst nematode.**

Johnson, H. G. MacDonald, D. H. & Plant pathology fact sheet. Document available from: University of Minnesota, Bulletin Room, 1420 Eckles Avenue, St. Paul, Minnesota 55108 1980. Includes field symptoms, verification, infestation, development and control for soybean cyst nematode. 1 sheet : ill. (NAL Call No.: Document available from source.)(NAL Call No.: FS No.35).

# ANIMAL DISORDERS - PHYSICAL TRAUMA

1986

**Black nightshade (*Solanum nigrum* L.) (Poisonous to livestock, weed of soybeans, chemical control).**

Fawcett, R.S. Jennings, V.M. Champaign, Ill.  
Weeds today. Spring 1979. v. 10 (2). p. 21.  
Ill. (NAL Call No.: SB610.W4).

# FARM EQUIPMENT

1987

**Applicators tested for soybean herbicide control.**

Lang, R. NE. Furrer, J.D. Lincoln, The Station. Farm, ranch and home quarterly. Nebraska. Agricultural Experiment Station. Winter 1980. v. 26 (4). p. 12-13. ill. (NAL Call No.: 100 N27N).

1988

**New machine paves way for three trip crop (Herbicides, cotton, soybeans).**

Garner, T.H. Memphis, Tenn., Meister. Cotton. International edition. 1981. 1981. p. 70, 72. ill. (NAL Call No.: 72.8 C82141).

1989

**Recirculating (herbicide) sprayers (Control of weeds in soybeans).**

Gebhardt, M.R. Champaign, Ill. Weeds today. Spring 1979. v. 10 (2). p. 18-20. ill. (NAL Call No.: SB610.W4).

1990

**Soybean emergence from field seedbed environments (Soil penetration resistance, different planter and drill press-wheel tires, fungicide seed treatment).**

Hummel, J.W. Gray, L.E.; Nave, W.R. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. July/Aug 1981. v. 24 (4). p. 872-879. ill. 9 ref. (NAL Call No.: 290.9 AM32T).

1991

**Soybean seed quality as affected by impact damage (Mechanical damage during harvesting and handling).**

Paulsen, M.R. Nave, W.R.; Gray, L.E. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1577-1582, 1589. ill. 10 ref. (NAL Call No.: 290.9 AM32T).

1992

**Soybean seed quality (damage) as affected by planter meters.**

Nave, W.R. Paulsen, M.R. St. Joseph, Mich., The Society. Transactions of the ASAE American Society of Agricultural Engineers. July/Aug 1979. v. 22 (4). p. 739-745. ill. 9 ref. (NAL Call No.: 290.9 AM32T).

1993

**Storability of harvest-damaged soybeans.**

Paulsen, M.R. Nave, W.R.; Mounts, T.L.; Gray, L.E. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1583-1589. ill. 16 ref. (NAL Call No.: 290.9 AM32T).

# NATURAL RESOURCES

1994

18 (4). p. 259-264. ill. 19 ref. (NAL Call No.: TD172.E52).

**Differential responses of plant foliage (Tradescantia sp., Pteridium aquilinum, Quercus palustris, and soybeans) to simulated acid rain (Air pollutants, adverse effects).**

Evans, L.S. Curry, T.M. Columbus, Ohio, Botanical Society of America. American journal of botany. Sept 1979. v. 66 (8). p. 953-962. ill. 21 ref. (NAL Call No.: 450 AM36).

1995

**Effects of air pollutants (carbon monoxide, nitrogen dioxide and sulphur dioxide) on seed germinability (cocklebur (Xanthium pennsylvanicum), pigweed (Amaranthus retroflexus), wild mustard (Brassica kaber), giant ragweed (Ambrosia trifida) and soybean (Glycine max)).**

Chakrabarti, A.G. New York. Bulletin of environmental contamination and toxicology. Apr 1979. v. 21 (6). p. 749-755. ill. 8 ref. (NAL Call No.: RA1270.P35A1).

1996

**Effects of sulfuric acid mist on plant canopies (Corn and soybeans, injuries).**

Wedding, J.B. Ligothe, M. Washington, American Chemical Society. Environmental science & technology. July 1979. v. 13 (7). p. 875-878. ill. 11 ref. (NAL Call No.: TD420.A1E5).

1997

**Field assessment of air pollution-induced soybean yield losses (Ozone, photochemical oxidants).**

Howell, R.K. Koch, E.J. Madison. Agronomy journal/American Society of Agronomy. Mar/Apr 1979. v. 71 (2). p. 285-288. ill. 21 ref. (NAL Call No.: 4 AM34P).

1998

**Polychlorinated biphenyls: phytotoxicity, absorption and translocation by plants, and inactivation by activated carbon (Effects on soybeans and fescue).**

Weber, J.B. Mrozek, E. Jr. New York, Springer Verlag. Bulletin of environmental contamination and toxicology. Oct 1979. v. 23 (3). p. 412-417. ill. 15 ref. (NAL Call No.: RA1270.P35A1).

1999

**Residence time of sulphite in SO2 (sulfur dioxide) 'sensitive' and 'tolerant' soybean cultivars (Injuries, toxicity caused by pollutants).**

Miller, J.E. Xerikos, P.B. Essex, Applied Science. Environmental pollution. Apr 1979. v.

# WATER RESOURCES AND MANAGEMENT

2000

**Leaf conductance and leaf-water potential relationships for two soybean cultivars grown under controlled irrigation.**

Carlson, R.E. Momen, N.N. Madison. Agronomy journal American Society of Agronomy. Mar/Apr 1979. v. 71 (2). p. 321-325. ill. 27 ref. (NAL Call No.: 4 AM34P).

2001

**Soil and water management in soybean production systems (Conservation tillage, erosion control, double-cropping, no-till, strip-cropping).**

Buntley, G.J. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Summer 1982. v. 66. p. 3-5. (NAL Call No.: 6 B46).

# DRAINAGE AND IRRIGATION

2002

Effect of irrigation on quackgrass (*Agropyron repens*) interference in soybeans (*Glycine max*) (Leaf water potential, soil moisture, weed control, Minnesota).

Young, F.L.WEESA. Wyse, D.L.; Jones, R.U.

Champaign : Weed Science Society of America.

Weed science. Sept 1983. v. 31 (5). p. 720-727.

111. Includes references. (NAL Call No.: 79.8 W41).

# FOOD STORAGE

2003

**Tests on Phomopsis-infected soybean seed under controlled storage conditions.**

Schoen, J.F. Schlub, P. (s.l.), The Association. The News letter of the Association of Official Seed Analysts. Sept 1980. v. 54 (3). p. 78-79. 2 ref. (NAL Call No.: 61.9 AS7N).

# FOOD STORAGE, FIELD CROP

**2004**

**The effects of temperature on longevity and vitality of soybean seeds (Storage).**

Bailey, Z.E. Ames, Iowa, The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1982. v. 9. p. 109-111. 111. (NAL Call No.: aSB205.S7S6).

**2005**

**Storability of harvest-damaged soybeans.**

Paulsen, M.R. Nave, W.R.; Mounts, T.L.; Gray, L.E. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1583-1589. 111. 16 ref. (NAL Call No.: 290.9 AM32T).

# FOOD COMPOSITION, FIELD CROP

2006

**Inheritance of fatty acid composition in soybean seed oil (Genetic control of oil biosynthesis).**

Martin, B.A. Carver, B.F.; Burton, J.W.; Wilson, R.F. Ames : The Service. Soybean genetics newsletter - United States, Agricultural Research Service. Apr 1983. v. 10. p. 89-92. Includes references. (NAL Call No.: aSB205.S7S6).

2007

**The role of the Northern Regional Research Center in the development of quality control procedures for fats and oils (Soybeans, flax, history, U.S. Department of Agriculture, Agricultural Research Service, Illinois).**

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2011

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Floore, T.G. Ruff, J.P. Ft. Myers, Fla. : The  
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2013

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2018

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**Foliar uptake and injury from saline aerosol (Peppers, tomato, soybeans).**

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2022

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Rubin, B. AR-NC. Leavitt, J.R.C.; Penner, D.; Saettler, A.W. New York, Springer. Bulletin of environmental contamination and toxicology. Oct 1980. v. 25 (4). p. 623-629. 10 ref. (NAL Call No.: RA1270.P35A1).

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Amundson, R.G. Weinstein, L.H. Madison, Wis., American Society of Agronomy. Journal of environmental quality. Apr/June 1981. v. 10 (2). p. 204-206. ill. 12 ref. (NAL Call No.: QH540.J6).

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Vig, B.K. Sung, R. New York, Plenum Press. Environmental science research. 1982. v. 24. p. 257-290. 40 ref. (NAL Call No.: TD172.E55).

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Miller, J.E. Sprugel, D.G.; Muller, R.N.; Smith, H.J.; Xerikos, P.B. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1980. v. 70 (12). p. 1124-1128. ill. 14 ref. (NAL Call No.: 464.8 P56).

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Medeiros, W.H. Moskowitz, P.D.; Coveney, E.A.; Thode, H.C. Jr. Pittsburgh, Pa. : Air Pollution Control Association. Proceedings ... APCA annual meeting. 1983. v. 1 (76th). p. 83-2.4/1-83-2.4/9. Includes references. (NAL Call No.: TD881.A56).

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Reinert, R.A. Weber, D.E. St. Paul, Minn., American Phytopathological Society. Phytopathology. Sept 1980. v. 70 (9). p. 914-916. 13 ref. (NAL Call No.: 464.8 P56).

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Adriano, D.C. Pinder, J.E. III; McLeod, K.W.; Corey, J.C.; Boni, A.L. Madison, Wis., American Society of Agronomy. Journal of environmental quality. July/Sept 1982. v. 11 (3). p. 506-511. ill. 12 ref. (NAL Call No.: QH540.J6).

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Johnston, J.W. Jr. Heagle, A.S. St. Paul, Minn., American Phytopathological Society. Phytopathology. Apr 1982. v. 72 (4). p. 387-389. Includes 10 ref. (NAL Call No.: 464.8 P56).

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**Response of corn and soybeans to simulated saline aerosol drift from brackish water cooling towers.**

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Sprugel, D.G. Miller, J.E.; Muller, R.N.; Smith, H.J.; Xerikos, P.B. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1980. v. 70 (12). p. 1129-1133. ill. 27 ref. (NAL Call No.: 464.8 P56).

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**Yield reduction of soybean due to exposure to sulfur dioxide and nitrogen dioxide in combination (Air pollution).**

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**Comparison of experimental designs used to detect changes in yields of crops exposed to acidic precipitation (Glycine max, air pollution effects, statistical evaluation).**  
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Moffitt, L.J. Farnsworth, R.L.; Zavaleta, L.R.; Kogan, M. Washington, D.C. : The Service. Extract: A preposterior decision model and a scouting model are used to estimate the economic benefits of an area-wide soybean insect prediction system in Illinois. Results suggest forecast reliabilities of the insect prediction system must exceed 90 percent accuracy before grower profits increase and acres scouted by consultants decrease. Insecticide use, however, can increase or decrease over a range of forecast reliabilities because of the shift from insect consultants to an area-wide public supported insect prediction system. If risk averse behavior is assumed, growers will likely apply more insecticides and hence reduce forecast prediction benefits. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Oct 1982. Available from NTIS, order no. PB83-128728. Oct 1982. (AGES821013). 31 p. Includes 15 references. (NAL Call No.: 916762(AGE)).

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**Indiana farm-level impacts of possible Environmental Protection Agency bans on selected soybean insecticides.**  
Cashman, C.M. Martin, M.A.; McCarl, B.A. Lexington, Ky., Southern Agricultural Economics Assoc. Extract: The primary purpose of our study was to determine the economic impacts of a possible ban by the Environmental Protection Agency on selected soybean insecticides used by some farmers in Indiana who face periodic soybean yield losses due to insect damage. A 600-acre Indiana corn-soybean farm was analyzed by means of a linear programming model. The economic impacts of possible bans on soybean insecticides were measured in terms of changes in per-acre yields, production costs, farm income, per-acre profits, machinery and labor use, and timeliness of field operations. Yield

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2042

Fecundity of the stable fly (*Stomoxys calcitrans*): Effect of soybean trypsin inhibitor and phospholipase A inhibitor on the fecundity.

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